DOCUMENT RESUME

ED 087 836 UD 014 074

TITLE	An Evaluation of Title I, ESEA Umbrella District Number 15, Summer 1972. A Title I Program.
INSTITUTION	New York Univ., N.Y. Center for Field Research and School Services.
SPONS AGENCY	New York City Board of Education, Brooklyn, N.Y.
PUB DATE	Oct 72
NOTE	103p.; Function Number 61-31604-31607
EDRS PRICE	MF-$0.65 HC-$6.58
DESCRIPTORS	Cultural Enrichment; Economically Disadvantaged; Elementary Education; Junior High Schools; Preschool Programs; *Program Evaluation; Remedial Instruction; *School Districts; Secondary Education; *Summer Programs; Summer Schools; *Urban Education
IDENTIFIERS	Elementary Secondary Education Act Title I; ESEA Title I; *New York City

ABSTRACT

The Head Start Program, established in the summer of 1971 in District 15 in Brooklyn, is a pre-school program for children of economically disadvantaged families. Its two main goals are: (1) to prepare children with no prior school experience for entry into kindergarten and first grade and (2) to involve parents in the education of their children by offering them needed educational and social services under the auspices of the schools in which their children are enrolled. The main emphasis of the Early Elementary Program, Grades One and Two, was directed toward the remediation of deficiencies in reading skills demonstrated by the children during the regular school year. 16 schools belonging to District 15 participated during the summer of 1972. The Later Elementary Program involved grades three through five in 16 of District 15's schools. The 1972 summer program varied according to the schools and individuals involved but the emphases on reading and mathematics were constant. Principals described the program as including activities titled "enrichment." These included dramatics, art, music, dance, trips, and ethnic cultural experiences. Most programs included a bilingual class for Spanish speaking children. A summer Junior High Program operated from July fifth through August eleventh at five schools for a total of 30 sessions. Approximately 2,000 children from the secondary schools of District 15 and from the non-public schools in the Title I area of District 15 were accepted for enrollment. In four of the five schools, the four hour school day was divided to permit three course offerings, whereas one school used modular scheduling. (Author/JM)

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AN EVALUATION OF TITLE I, ESEA UMBRELLA

DISTRICT #15, SUMMER 1972

A TITLE I PROGRAM

An evaluation of a New York City school district educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed under contract with the Board of Education of the City of New York for the 1971-72 school year.

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UD 014074

October, 1972

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September 30, 1972

Dr. David Abramson
Acting Director
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Dear Dr. Abramson:

In fulfillment of the agreement dated August 7, 1972 between the New York City Public Schools and the Center for Educational Research and Field Services, I am pleased to submit three hundred copies of the final report, An Evaluation of Title I, ESEA Umbrella, District #15, Summer 1972.

The Bureau of Educational Research and the professional staff of the New York City Public Schools were most cooperative in providing data and facilitating the study in general. Although the objective of the team was to evaluate a project funded under Title I, this report goes beyond this goal. Explicit in this report are recommendations for modifications and improvement of the program. Consequently, this report will serve its purpose best if it is studied and discussed by all who are concerned with education in New York City -- the Board of Education, professional staff, students, parents, lay leaders, and other citizens. To this end, the study team is prepared to assist with the presentation and interpretation of its report. In addition, the study team looks forward to our continued affiliation with the New York City Public Schools.

You may be sure that New York University and its School of Education will maintain a continuing interest in the schools of New York City.

Respectfully submitted,

Arnold Spinner

ARNOLD SPINNER
DIRECTOR

AS:jh

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PRESCHOOL PROGRAM

INTRODUCTION

The Head Start Program, established in the summer of 1971 in District 15 in Brooklyn, is a pre-school program for children of economically disadvantaged families. Its two main goals are (1) to prepare children with no prior school experience for entry into kindergarten and first grade and (2) to involve parents in the education of their children by offering them needed educational and social services under the auspices of the schools in which their children are enrolled.

THE CHILDREN'S PROGRAM

Depending on the number of eligible children in each community, two to four classes were set up in each of sixteen schools. Class size was limited to a maximum of twenty children, five and six years of age, who had never before attended school. A bilingual class was created in the schools which have a large population of students who speak English as a second language. Teachers taught these classes in both Spanish and English.

The Head Start Program extended for six weeks. The children attended daily from 9:00 to 12:30 P.M. during which time they were exposed to a variety of structured and unstructured activities. A snack was served at mid-morning and a hot lunch prior to going home.

The goals set for the children of the Head Start Program were:

1. To improve the child's health. Well-balanced lunches were served each day. Dental services were provided for all children. The teacher checked children's general physical condition, including their height, weight, eyes, and speech.

If a physical deficiency or an emotional problem was discovered, the parent was assisted with procedures to correct the problem through the intervention of a Family Assistant or Family Worker.

2. To help the child's emotional and social development by encouraging self-confidence, self-expression, self-discipline, and curiosity.
3. To improve and expand the child's mental processes, aiming at expanding the ability to think, reason, and speak clearly.
4. To help the child to get wider and more varied experiences which will broaden his horizons, increase his vocabulary, and improve his understanding of the world in which he lives. This goal was to be furthered in all classroom activities, including the purchasing of special foods for instructional purposes, neighborhood walks and bus trips to such places as the Aquarium.
5. To give the child frequent opportunity to succeed in order to erase the patterns of frustration and failure, and especially the fear of failure.
6. To develop a climate of confidence for the child which will stimulate his desire to learn.

THE PARENT ACTIVITY PROGRAM

The other vital part of Head Start was the Parent Activity Program, designed to involve the parents in the education of their children.

This was done by means of (1) visits to the homes of participating children and (2) encouraging the parents to utilize school facilities during the hours their children were in class. It was hoped, thereby, to make school an open, friendly place where parents could congregate for their own educational and socialization needs and where they could obtain practical assistance with problems related to the utilization of other community agencies such as Welfare, Medicaid, or the Immigration Department.

In each school there was a family room where parents were invited and encouraged to remain the entire morning after dropping off their children. Coffee and cake were provided, as well as newspapers and magazines. Parents could sit and talk, consult the Family Assistant about personal problems, or participate in a variety of formal educational and social activities. These included (1) classes, meeting once or twice weekly, providing instruction in sewing, crochetting, crafts, typing and English as a Second Language (2) weekly lectures by guest speakers on topics such as Lead Poisoning, Nutrition, Family Planning and Dental Hygiene (3) trips to various parts of the city such as museums, Fulton Fish Market, shopping on the Lower East Side, Chinatown, and Circle Line Tour of Manhattan (4) special events including a fashion show displaying clothes made during the summer sewing classes, an International Luncheon featuring foods prepared by parents of various ethnic backgrounds, and teacher-led workshops demonstrating the kinds of activities occurring in the children's classrooms and involving parents in demonstration lessons.

The goals of the Parent Activity Program were:

1. To help both the child and his family to feel welcome and respected in the school and to increase their feelings of confidence, self-respect, and dignity.
2. To help parents to develop effective methods of child care.
3. To help the family to understand their child and his problems and to become actively involved in their child's education.
4. To help the parents to develop a responsible attitude toward society and foster feelings of belonging to a community so that they will become active members of that community.
5. To help to enrich the parents' environment and to make them aware of resources in the city. It is hoped that the parents in turn could help to make their children's lives richer.

STAFFING PATTERNS

The personnel implementing the Head Start Program were divided into two categories determined by their basic area of responsibility. One group was charged with implementing the classroom program, the other with the Parent Activity Program. These groups were further sub-divided on the basis of their work locations, with certain staff members assigned in-school responsibilities and others, whose function was largely supervisory, assigned to the District Office. District Office personnel made daily visits to the schools on a rotating basis.

Personnel Assigned to Each School:

The classroom teaching team in each school consisted of a teacher

and an educational assistant. Working as a unit, they shared all classroom responsibilities including instruction of small groups, preparation of teaching materials and housekeeping duties. In many instances, the classroom teams were composed of the same people who had worked together during the regular school year. Consequently, they were able to cooperate effectively with a minimum of consultation.

The Parent Activity Program staff in each school was composed of a group of family workers headed by a family assistant. There was one family worker assigned to each class. Her function was primarily one of liaison between the school, the home, and the community. She visited homes to assess the conditions in which the children lived, obtained health histories, and offered practical assistance to parents in the solution of family problems. In those situations in which community resources could be utilized, the family worker made the parents aware of the existence of such programs as Welfare and assisted them in obtaining benefits.

An important aspect of the family worker's job was to insure maximum attendance of the children in school. She investigated absences to determine whether the cause could be remedied. In cases where parents, due to work schedule or illness, were unable to take the child to school, she provided escort service to and from school.

The family worker, in her contacts with parents, also encouraged them to visit the school to get involved in the Parent Activity Program, to visit the classroom during open school days, and generally to take an interest in their children's education.

Those parents who took advantage of the Parent Activity Program were under the jurisdiction of the family assistant. In each case, the person selected for this job had formerly been a family worker so that she possessed the necessary training and information to support the efforts of the school's family workers in the solution of family problems. The focus of the family assistant's role, however, was to serve as organizer and catalyst of parents' activities such as trips, lectures, and special events held in the school.

Teenagers from the Neighborhood Youth Corps served as auxiliary personnel in the classroom and parents' programs. About half of the schools in the Head Start Program utilized Youth Corps personnel. Each school was allowed to use its own discretion to determine whether or not to avail itself of this additional source of manpower.

The District Office Staff:

The Head Start Supervisor worked in conjunction with four assistants to insure the smooth operation of the entire program. She met with them daily in advance of their visits to the various schools. The two curriculum assistants were "master teachers" of Early Childhood who had several years of experience in the schools of District 15. They visited classrooms and served as resources for the classroom teachers. The two Parent Program assistants served a similar function by helping the family assistants in each school to plan their Parent Activity Program. The Supervisor of Head Start also visited the schools on a regular basis. She held regular weekly staff meetings in each school and was actively involved in every aspect of the entire program.

Recruitment of Personnel from the Community:

A large majority of the Head Start staff was drawn directly from among the residents of the geographic area served by School District 15. Furthermore, most of these people had previously worked in the same school and had been selected by their school principal for summer work on the basis of prior satisfactory service. Final determination of eligibility was then made by a local Manpower Training Center which evaluated whether the applicant met a poverty criterion based on the previous year's income. Educational assistants were required to meet an additional requirement regarding level of education. A high school diploma, or its equivalent, was required for the position. Many of those working as educational assistants exceeded this minimal educational requirement since they were currently attending college in preparation for a teacher's license.

Although classroom teachers and supervisors were not required to be residents of the community, all were regular staff members of schools in District 15 with experience in the summer program.

ANALYSES

One of the objectives of the pre-school program was to encourage the social and emotional development of participating pupils. The Social-Emotional Behavior and Perception Scales were administered by the evaluation team in order to measure the success of this objective. Both scales are appended.

The Social-Emotional Scale is composed of five subscales:

1. Behavioral Characteristics

2. Social Relationships

3. Attention

4. Emotional Development and Control

5. Acceptance of Responsibility

Head Start teachers rated each child at the beginning and at the end of the summer program on each of several characteristics subsumed under each subscale. The ratings were based on a three-point scale reflecting the degree to which the child manifested a given attribute. The ratings were assigned such that 1 = minor degree, 2 = moderate degree, and 3 = major degree.

Since the items were phrased as negatively-valued characteristics (e.g., "lacking in self-control"), a child who exhibited the trait "to a minor degree" was considered to function better than a child who exhibited the trait "to a major degree." Thus, in the following tables referring to the Social-Emotional Scale, a lower mean score reflects better social-emotional performance. Tables I through V show the comparison between pre- and post-performance on the five subscales of the Social-Emotional Scale.

TABLE I

COMPARISON BETWEEN PRE- AND POST-TEST ON THE BEHAVIORAL CHARACTERISTICS SUBSCALE OF THE SOCIAL-EMOTIONAL SCALE

	MEAN		SD		ALPHA RELIABILITY	
SUBSCALE	PRE	POST	PRE	POST	PRE	POST
1	12.05	11.04	4.18	3.59	.86	.84

N = 174

The behavioral characteristics subscale included such items as "hyperactive and restless," "inconsistent achievement," and "explosive and unpredictable behavior." Table I indicates that the children showed substantial improvement in behavior over the course of the program. The comparison between the pre- and post-test means resulted in an F-ratio of 10.08, significant at the .01 level with 1 and 173 degrees of freedom. A high degree of reliability is reported for this subscale, as well as for each of the others.

TABLE II

COMPARISON BETWEEN PRE- AND POST-TEST
ON THE SOCIAL RELATIONSHIPS SUBSCALE
OF THE SOCIAL-EMOTIONAL SCALE

	MEAN		SD		ALPHA RELIABILITY	
SUBSCALE	PRE	POST	PRE	POST	PRE	POST
2	5.40	4.91	2.06	1.81	.76	.77

N = 172

Table II shows similar improvement for the social relationships subscale. The category includes items such as "aggressive and destructive," "disruptive of group activities," and "lacking in cooperation." The pre-post comparison of means yielded an F-ratio of 13.23, significant at the .01 level with 1 and 171 degrees of freedom.

The lower post-test mean reported in Table III indicates the positive growth in pupil performance on the attention subscale. The following items are representative of this category: "Cannot con-

TABLE III

COMPARISON BETWEEN PRE- AND POST-TEST
ON THE ATTENTION SUBSCALE OF
THE SOCIAL-EMOTIONAL SCALE

SUBSCALE	MEAN PRE	MEAN POST	SD PRE	SD POST	ALPHA RELIABILITY PRE	ALPHA RELIABILITY POST
3	8.56	7.38	3.56	2.87	.92	.93

N = 174

centrate on a given academic or social task," "Does not listen attentively," "Needs constant supervision," and "Lacks perseverance." The positive gain between pre- and post-test means is associated with an F-ratio of 22.52, significant at the .01 level with 1 and 173 degrees of freedom. The subscale proved highly reliable, as the alpha coefficients show.

TABLE IV

COMPARISON BETWEEN PRE- AND POST-TEST ON THE EMOTIONAL
DEVELOPMENT AND CONTROL SUBSCALE OF THE
SOCIAL-EMOTIONAL SCALE

SUBSCALE	MEAN PRE	MEAN POST	SD PRE	SD POST	ALPHA RELIABILITY PRE	ALPHA RELIABILITY POST
4	15.55	14.24	5.54	4.91	.91	.91

N = 173

Table IV contains the data relevant to the emotional development and control subscale. A comparison between pre- and post-test means resulted in an F-ratio of 11.49, significant at the .01 level with 1 and 172 degrees of freedom. The lower post-test mean indicates a

change in a positive direction on a number of indices. These include "emotional stability" (insecurity, temper, fear, crying, etc.), "self-reliance" (confusion, dependence, lack of confidence, discouragement), and "reality-testing." The subscale as a whole achieved a very high alpha reliability coefficient (.91) on both pre- and post-tests.

TABLE V

COMPARISON BETWEEN PRE- AND POST-TEST ON THE ACCEPTANCE OF RESPONSIBILITY SUBSCALE OF THE SOCIAL-EMOTIONAL SCALE

	MEAN		SD		ALPHA RELIABILITY	
SUBSCALE	PRE	POST	PRE	POST	PRE	POST
5	1.41	1.24	.66	.57	*	*

N = 166

*No reliabilities reported for single items.

Table V reports the data relevant to a subscale which contained only a single item: "Poor acceptance of responsibility." A comparison between pre- and post-test means resulted in an F-ratio of 10.08, significant at the .01 level with 1 and 165 degrees of freedom. The significant lower post-test mean represents positive growth in pupils' ability to accept responsibility in the classroom.

A general overview of the Social-Emotional Behavior Scale indicates that program participants demonstrated significant and substantial growth on each of its subscales. Further, each subscale had high reliability on both pre- and post-tests. Educational psychologists have demonstrated that emotional readiness is a necessary precondition for effective learn-

ing. The amelioration of social interaction in the classroom and of the child's ability to participate in a social setting are critically important in terms of his ability to learn in a group. The pre-school program's emphasis on building social and emotional capacities, as well as academic ones, reflects a concern for the total child.

An emphasis on the children's perceptual development reflects this same concern. In order to assess the performance in this area, the evaluation team administered the Perception Scale, a measure composed of six subscales:

1. Gross Motor Coordination
2. Fine Motor Coordination
3. Sense of Rhythm
4. Visual and Motor Coordination
5. Auditory Discrimination
6. Visual Discrimination

Teacher pre- and post-rated the children on each of the characteristics subsumed under the six subscales. The ratings were based on a three-point scale in which 1 = good, 2 = fair and 3 = poor. Therefore, as in the Social-Emotional Scale, a lower mean score reflects better perceptual performance. The comparison between pre- and post-test means for the Perception Scale are presented in Tables VI through X.

Table VI contains data relevant to the Gross Motor Coordination subscale. Pupils were rated on such abilities as "catching or throwing a ball," "walking in a straight line," and "balancing." A comparison

TABLE VI

COMPARISON BETWEEN PRE- AND POST-TEST ON THE GROSS MOTOR COORDINATION SUBSCALE OF THE PERCEPTION SCALE

	MEAN		SD		ALPHA RELIABILITY	
SUBSCALE	PRE	POST	PRE	POST	PRE	POST
1	10.67	8.21	4.06	3.07	.90	.92

N = 174

between pre- and post-test means resulted in an F-ratio of 63.18, significant at the .01 level with 1 and 173 degrees of freedom. The alpha reliability coefficient was very high for both pre- and post-tests. Thus pupils demonstrated improved gross motor coordination at the completion of the program.

TABLE VII

COMPARISON BETWEEN PRE- AND POST-TEST ON THE FINE MOTOR COORDINATION SUBSCALE OF THE PERCEPTION SCALE

	MEAN		SD		ALPHA RELIABILITY	
SUBSCALE	PRE	POST	PRE	POST	PRE	POST
2	16.04	12.22	4.88	4.45	.90	.89

N = 174

A similar caliber of positive growth was demonstrated on the fine motor coordination subscale. Teachers were asked to rate pupils on several abilities including "position or grip on a pencil," "tying of shoelaces," and "competency in writing." The pre-post comparison of means resulted in an F-ratio of 94.40, significant at the .01 level

with 1 and 173 degrees of freedom. Again, the subscale was highly reliable.

TABLE VIII

COMPARISON BETWEEN PRE- AND POST-TEST ON THE SENSE OF RHYTHM SUBSCALE OF THE PERCEPTION SCALE

	MEAN		SD		ALPHA RELIABILITY	
SUBSCALE	PRE	POST	PRE	POST	PRE	POST
3	6.84	5.20	2.26	1.92	.87	.90

N = 174

Table VIII shows that significant positive growth was also demonstrated on the sense of rhythm subscale. The category includes such items as "ability to recognize or imitate simply rhythmic patterns," and "marching or dancing to music." A comparison between pre- and post-test means yielded an F-ratio of 76.64, significant at the .01 level with 1 and 173 degrees of freedom.

TABLE IX

COMPARISON BETWEEN PRE- AND POST-TEST ON THE VISUAL-MOTOR COORDINATION SUBSCALE OF THE PERCEPTION SCALE

	MEAN		SD		ALPHA RELIABILITY	
SUBSCALE	PRE	POST	PRE	POST	PRE	POST
4	5.90	4.22	2.34	2.19	.93	.95

N = 167

Table IX presents a comparison between pre- and post-tests on the visual-motor coordination subscale. A significant F-ratio of 73.63

was found. This was significant at the .01 level with 1 and 166 degrees of freedom. On this subscale, pupils showed substantial positive gain in ability to copy correctly from near and far points and in ability to reproduce geometric figures. Reliability of both pre- and post-tests was very high.

TABLE X

COMPARISON BETWEEN PRE- AND POST-TEST ON THE AUDITORY AND VISUAL DISCRIMINATION SUBSCALES OF THE PERCEPTION SCALE

SUBSCALE	MEAN PRE	MEAN POST	SD PRE	SD POST	ALPHA RELIABILITY PRE	ALPHA RELIABILITY POST
5. Aud. Disc.	1.72	1.34	.78	.56	*	*
6. Vis. Disc.	1.58	1.24	.65	.48	*	*

N = 173

*No reliabilities reported for single items.

The Perception Scale contained two single items, auditory discrimination and visual discrimination, each considered to be a subscale within itself. Table X shows that pupils demonstrated substantial improvement on both subscales. The comparison between pre- and post-test means yielded significant F-ratios for both measures. For auditory discrimination, the F-ratio was 59.52; for visual discrimination, 56.64. Both F-ratios are associated with 1 and 172 degrees of freedom and are significant at the .01 level.

A review of the Perception Scale reveals that pupils participating

in the program made significant gains in performance on each of the subscales. The subscales themselves all proved to be highly reliable. The significant growth in these areas is meaningful since competence in perceptual functioning is considered critically important to future cognitive growth. Many educators feel that without basic perceptual skills, further learning of more complex skills is severely inhibited. It is in this framework that the importance of both perceptual and cognitive growth is emphasized in the objectives of the pre-school program.

TABLE XI

COMPARISON BETWEEN PRE- AND POST-TEST ON THE OVERALL RATINGS OF THE SOCIAL-EMOTIONAL BEHAVIOR AND PERCEPTION SCALES

	MEAN		SD		ALPHA RELIABILITY	
SCALE	PRE	POST	PRE	POST	PRE	POST
SOC-EMOT.	1.46	1.26	.64	.52	*	*
PERCEPT.	1.79	1.38	.64	.55	*	*

*No reliabilities reported for single items.

The general success of the program in improving both social-emotional and perceptual functioning is substantiated in Table XI. Teachers gave each pupil an overall assessment of performance in the two areas at the beginning and at the end of the program. The comparison between the pre- and post-test means for the two overall ratings, one for each of the scales, yielded significant F-ratios in both cases. The Social-Emotional comparison resulted in an F-

ratio of 18.18, significant at the .01 level with 1 and 169 degrees of freedom. The Perception comparison resulted in an F-ratio of 58.49, significant at the .01 level with 1 and 171 degrees of freedom.

Table XI summarizes very briefly the growth in performance demonstrated by participating pupils on indices other than academic ones. It is stressed that social-emotional and perceptual competence is highly important in complementing and strengthening academic achievement. The pre-school program appears to have been highly successful in nurturing growth in both of these areas.

EARLY ELEMENTARY PROGRAM

GRADES 1 AND 2

Sixteen schools belonging to District 15 in Brooklyn participated in an early elementary school program during the summer of 1972. The program was conducted for a six-week period during the months of July and August. The program's main emphasis was directed toward the remediation of deficiencies in reading skills demonstrated by the children during the regular school year.

PROGRAM DESCRIPTION

Children who would be entering second and third grade in the fall participated in the summer school program. Registration for the program was made on a totally voluntary basis, but it was hoped that children who needed remedial help in academic skills, particularly reading, would be the students reached primarily.

Both established and innovative techniques were applied in an effort to enhance the level of a student's reading achievement. In addition to reading instruction, other content areas such as mathematics were included in the summer program. Many schools offered enrichment programs emphasizing music, art, drama, and dance in addition to remedial work.

Children attended school every weekday from 9:00 A.M. to 12:00 noon. An effort was made to keep class size small, and all classes observed had educational assistants who, in most cases, appeared to be engaged in valuable service to the teacher.

The materials and methods used in the summer program were in the

main the same as those employed during the regular school year. Certain innovative techniques were employed, however, in several schools. Those schools which instituted instructional departmentalization and/or established enrichment programs employed teachers who specialized in a content area, such as science, art, or music. Principals and teachers conducted their programs generally in the same schools that they had worked during the previous school year.

PROGRAM OBJECTIVES

1. Seventy percent of the children participating in the summer program who have attended 20 or more sessions will increase their reading comprehension by at least two months.
2. Seventy percent of the children who have attended 20 or more summer school sessions will show at least two month's gain in reading vocabulary.
3. Seventy percent of the participating children who have attended 20 or more summer school sessions will have improved by two months in mathematics.

EVALUATION

Objective. The evaluation design had as its purpose the assessment of the degree to which the program had attained its objectives. Attainment of these objectives would be indicated by a gain or at least two months in the areas of reading comprehension, reading vocabulary, and mathematics demonstrated by 70% of those in the sample population. Students selected to serve as a sample population had attended at least twenty sessions of the summer program. The extent of improvement shown

by this sample population was indicated by scores on objective tests administered upon initiation and again upon termination of the program. Further light on the extent of progress evidenced by the participating students was provided by the results of statistical tests performed on the pre- and post-test scores. Data for this evaluation were obtained by the New York University evaluation team.

Subjects. Randomly selected samples of 139, 123, and 130 first and second grade pupils who attended at least twenty sessions of the summer program served as subject populations for determining extent of improvement in reading comprehension, reading vocabulary, and mathematics, respectively.

Method. The reading comprehension, reading vocabulary, and mathematics problems and concepts sections of the California Achievement Tests, Level 1, Form A, were administered to the sample population in July at the beginning of the summer program and served as the pre-test assessment. Form B of the same three sections of the California Achievement Tests was administered to the sample population in August upon termination of the program and represented the post-test measurement. Raw scores on the California Achievement Tests were converted to grade equivalent scores for all subjects in the sample population.

In an attempt to assess the social-emotional atmosphere created in the classroom by the teacher the Withall Social-Emotional Climate Index was used. This instrument provides a frequency count of teacher statements falling within seven categories, which presumably are indicators of the social-emotional climate characteristic of a classroom. Statements

are classified as: learner supportive; acceptant or clarifying; problem-structuring; neutral; directive; reproving, disapproving, or disparaging; or teacher-supportive. A sample of eleven classrooms was selected for evaluation with the Withall scale. A standard time period of ten minutes was used in each classroom to obtain a sample of the emotional-social climate.

Results. Table XII presents the number and percentage of children in the sample population who gained at least two months in reading comprehension as assessed by the reading comprehension section of the California Achievement Tests. Thirty-eight percent of the children evidenced at least a two month gain. This figure falls below the 70% required to meet the program objective. On the basis of this differential between actual and expected percentage it must be concluded that the program did not achieve its objective in improving reading comprehension.

TABLE XII

NUMBER AND PERCENTAGE OF CHILDREN WHO GAINED AT LEAST TWO MONTHS IN READING COMPREHENSION, READING VOCABULARY, AND MATHEMATICS PROBLEMS AND CONCEPTS ON THE CALIFORNIA ACHIEVEMENT TESTS, LEVEL 1

	N	Number Showing Two Months Gain	Percentage Showing Two Months Gain
Reading Comprehension	139	53	38
Reading Vocabulary	123	66	54
Mathematics Problems and Concepts	130	72	55

Table XIII shows the mean pre-test, post-test, and difference grade scores for the sample population on the reading comprehension section of the California Achievement Tests. These statistics actually show a small decrease in reading comprehension skills over the six-week period of the summer program. Statistical analysis in the form of a t-test for correlated samples performed on the pre- versus post-test scores showed this decrease to be not significant, however (see Table XIII).

TABLE XIII

RESULTS FOR READING COMPREHENSION SECTION
OF CALIFORNIA ACHIEVEMENT TESTS,
LEVEL 1

	N	Mean*	SD	t	Significance
Pre-Test	139	1.88	1.03	1	n.s.
Post-Test	139	1.81	1.10		
Difference		-.07			

*Grade Equivalent Score

Table XII depicts the number and percentage of children in the sample population who gained at least two months in reading vocabulary as measured by the reading vocabulary section of the California Achievement Tests. In this case, 54% of the children demonstrated at least a two month gain. Although this figure represents a substantial increase over the results for reading comprehension, it still falls below the 70% required to meet the stated objective of the program. Using this criterion exclusively, it must be concluded that the program did not meet its objective in increasing the children's reading vocabulary.

It may be argued, however, that the results shown in Table XIV do indicate success in improving reading vocabulary. Table XIV presents the mean pre-test, post-test, and difference grade scores for the sample population on the reading vocabulary section of the California Achievement Tests. The mean pre- versus post-test difference indicates a substantial increase in reading vocabulary evidenced by the sample population as a whole. A t-test for correlated samples was performed on pre-test and post-test scores, and results showed this difference to be highly significant (see Table XIV). This result indicates that many children showed substantive gains in reading vocabulary.

TABLE XIV

RESULTS FOR READING VOCABULARY SECTION OF CALIFORNIA ACHIEVEMENT TESTS, LEVEL 1

	N	Mean*	SD	t	Signifiance
Pre-Test	123	1.35	.77	6 42	.0001
Post-Test	123	1.87	1.12		
Difference		.52			

*Grade Equivalent Score

Table XII depicts the number and percentage of children in the sample population who showed at least a two-month improvement in mathematics on the basis of results from the mathematics problems and concepts section of the California Achievement Tests. Despite the fact that more than half the children in the sample population (55%) showed at least a two month gain, the expected percentage was not attained, and, therefore, it must

be stated that the sought after level of improvement in mathematics was not achieved. Just as in the case of the reading vocabulary results, it is necessary to examine the mean pre- post-test difference to obtain a more nearly complete view of the findings.

Table XV presents the mean pre-test, post-test, and difference grade scores for the sample population on the mathematics problems and concepts section of the California Achievement Tests. A mean increase in mathematics skill is indicated. The statistical significance of this increase was tested by performing a t-test for correlated samples on the pre-test and post-test scores. It may be seen from an examination of Table XV that results of the t-test show this increase to be highly significant.

TABLE XV

RESULTS FOR MATHEMATICS PROBLEMS AND CONCEPTS SECTION OF CALIFORNIA ACHIEVEMENT TESTS, LEVEL 1

	N	Mean*	SD	t	Significance
Pre-Test	130	1.42	.90	5.98	.0001
Post-Test	130	1.88	1.13		
Difference		.46			

*Grade Equivalent Score

There exists a conflict in the case of the results from reading vocabulary and mathematics between two possible criteria of program success. If the criterion of at least a two-month increase by 70% of the sample population is used to indicate success, it must be concluded from results on the achievement tests that the program failed. On the

other hand, mean improvement of more than two months was shown by the sample population as a whole in both reading vocabulary and mathematics, and this improvement was statistically significant. It may be felt by some that this result indicates the program did achieve success in increasing the children's level of proficiency in these areas.

An attempt will not be made in this evaluation to recommend that one or the other of these criteria be the one employed. Each represents a useful way of looking at the data. By employing both, however, in an analysis of the results, this fact emerges. The summer program did not result in widespread improvement in reading vocabulary and mathematics, but it did produce in many children a considerable improvement in proficiency pertaining to these skills an improvement so great as to offset the little or no improvement shown by the remaining children, and thus result in producing a substantial mean increase in post-test scores for the sample population as a group. It rests finally with the program directors to decide which of these two results represents what they were seeking.

Table XVI shows the results of the assessment of the social-emotional climate of a sample of classrooms observed as part of this evaluation. An outstanding finding of this assessment was that teachers tended to use directive statements quite frequently. Some educators might object to a heavy dependence on creating this kind of classroom atmosphere, as it may limit initiative and self-direction. It is recognized that the younger children in this group need more direction than children in higher grades.

TABLE XVI

RESULTS OF WITHALL SCALE EVALUATION OF SOCIAL-EMOTIONAL CLIMATE IN THE CLASSROOM

Teacher Statement Categories	Summed Frequencies For All Classrooms
1. Learner Supportive	63
2. Acceptant or Clarifying	7
3. Problem-Structuring	49
4. Neutral	102
5. Directive	197
6. Reproving, Disapproving, or Disparaging	62
7. Teacher-Supportive	15

RECOMMENDATIONS

The following recommendations are based on information obtained through on-site observations of daily classroom operation and through interviews with teachers and principals who conducted and administered the 1972 summer program. It is hoped that these recommendations will be viewed as representing an offering of constructive suggestions, rather than a presentation of a list of criticisms.

It is recommended that:

1. A greater effort be made to recruit children for the summer program who are genuinely in need of remedial help. The program as it stands misses many children who have demonstrated academic deficiencies during the

regular school year. Every effort should be made to influence these children to join the summer program. This is not to say that other children who desire to participate in the program should be denied the opportunity.

2. Teachers view the summer program as providing a vehicle for experimentation and the trying of new methods and techniques. The same pressure does not exist in the summer program as in the regular school year, and teachers should feel free to develop and implement new approaches. This is especially important when considering that many of the children in the summer program have failed when taught with the usual methods used during the school year.
3. Relevance to real life experience be taken into account when selecting materials. It is felt that choosing materials that children can relate to would increase interest and motivation. Reading materials that show continuity with children's everyday experience and desires would be more successful in getting children to read them many of the materials available now. For example, subject matter involving TV or movie heroes might be employed.
4. There be more uniform agreement across schools as to the proper balance of remediation and enrichment that would be consistent with the objectives of the program. There seemed to be great variation among schools as to the allocation of

time for remediation versus enrichment. It is recognized that there should be freedom and flexibility in this regard, but the establishment of clear guidelines would be highly useful.

5. Greater emphasis be placed on individualization of instruction. Many teachers did try to individualize instruction, but it was felt that whole group teaching was applied in too many cases to realize maximum benefit for the students. Individualization is especially important for children needing remedial help. It is too easy for them to get lost in the crowd.

6. Trips be vigorously encouraged and by all means when promised, delivered. Trips are educational, recreational, break-up the routine, and motivate attendance.

7. That the tone of instruction (in several cases) be less directive and more supportive and "learner centered." Initiative and self-discovery in problem solving should be fostered.

8. Follow-up observations be made on children who demonstrated acceptable gains during the summer to determine stability of improvement over time and the extent of its carry-over into the regular school year.

9. Children who did not show gains be given further help during the school year and an effort be made to determine why these children did not derive remedial benefit from the program.

10. The summer program budget be approved earlier so principals

will know where they stand and can get an early start on the acquisition of materials, etc.

11. Materials designated for the summer program be used only for the summer program.
12. Every effort be made to keep class size at a minimum without sacrificing maximum availability of the program to students who need and want to participate.
13. A possible innovation worth trying might be for children to help each other in doing lessons and solving problems. In this way, children who are stronger in an area may be able to help those who show weaknesses, with benefits to both. An approach such as this may free up teacher time while facilitating learning and perhaps helping to instill values of cooperation and responsibility.
14. Children be allowed to take material home. This practice may encourage parents to help children with their work and, in general, to become more involved in the summer program. It may also increase the student's involvement and would give the student a sense of ownership and responsibility.
15. Teachers seek to make greater use of available electronic equipment such as tape recorders and talking story books, in order to enhance and vary the instructional program.
16. A concerted effort be made by the supervisory staff of each school to communicate with organizations and agencies

in the community which conduct summer programs for children. Through communication and perhaps mutual planning, an avoidance of overlapping services and competition may be achieved.

17. A consideration be made of integrating the summer day camp with the summer school program so as to increase the attendance in the summer school program.
18. Greater emphasis be placed on the value of frequent communication among the personnel of the schools participating in the summer program. This practice would result hopefully in the sharing of ideas, innovations, and solutions to problems.
19. School and District personnel seek to discover means of increasing and stabilizing attendance and preventing children from permanently dropping out of the program. Ways should be sought to make the program as attractive to children as possible.
20. Thought be given to an extension of the program beyond six weeks.
21. Greater effort be made to enlist children's desires and thoughts in the decision process relating to the determination of materials to be used and the structure of the classroom program.
22. Major consideration be given in all schools to the importance of maintaining good community relations

during the summer. This is especially true for a program in which attendance is voluntary. Many schools showed recognition of the value of community involvement, and specific activities and programs designed to accomplish this were instituted.

23. Principals have the greatest freedom possible to choose their personnel.

24. There be more experimentation in innovation on a school-wide basis, such as an attempt at departmentalization or the establishment of a reading center. The summer is the perfect time to try these out. The traditional methods and educational structure have failed for many of these children.

GENERAL SUMMARY AND CONCLUSIONS

Overall, this evaluator was favorably impressed by the operation of this program. Principals, teachers, and other personnel appeared competent and dedicated to accomplishing something worthwhile with the children. From observations of classroom activity it was clear that most children were actively involved in learning and were enjoying the time they were spending in class. They seemed in most cases to be enjoying intrinsically the school experience.

This evaluation contains quite a few recommendations, but this fact should not be interpreted as reflecting a negative judgment of the program. These recommendations should be considered as ways in which a good program can be made better. They represent a synthesis of information acquired

through onsight observations in the schools by this evaluator and his assistant and through interviews of principals and teachers.

Results from pre- and post-testing using the California Achievement Tests were complex and demanded careful interpretation. On the basis of results from the subject population, the objectives of at least a two-month gain by 70% of the students in the areas of reading comprehension, reading vocabulary, and mathematics were not met. But the mean improvement in reading vocabulary and mathematics of the sample population was substantial, indicating that despite the fact that improvement in these areas was not as widespread as was desired, many children did demonstrate considerable gains.

Besides the issue of academic gains, there are other benefits of this program that should be considered. For one, children are exposed to important values and attitudes concerning such things as the worth and enjoyment of learning and the importance of cooperation and courtesy in a group situation. They have close contact with accepting and caring adults, and they have a chance to accomplish something in an atmosphere devoid of pressure. For many, there is an opportunity for having fun and acquiring skills in non-academic pursuits, including music, dance, art, and drama. Finally, not the least of which for many children is experiencing for part of the day an environment that is safe and predictable.

LATER ELEMENTARY PROGRAM

The later elementary program involved grades 3 through 5 in sixteen of District 15's schools.

PROCEDURE

Evaluation Objectives

Evaluation of the Later Elementary Program was directed toward the following objectives:

1. To describe the program.
2. To elicit information from principals and auxiliary personnel about recruitment and training, unique program aspects and recommendations for future programs.
3. To assess the growth of a) reading vocabulary b) reading comprehension, and c) mathematics made by a sample group of children in the program.
4. To establish conclusions and recommendations based on the information collected.

Evaluation Plan

Information about the program and personnel was gathered by:

Observation and Analysis in Classroom

Introductory visits to 16 schools.

Observations in 16 schools

Specific analysis of activities in 19 classrooms

Observation of 24 tutors

Interviews

16 Principals

14 Tutors

2 Assistant Principals

Questionnaires

16 Principals

Information about childrens' achievement gains in reading vocabulary comprehension and mathematics was provided by the California Achievement Test toward the following objective:

> "Seventy percent of the pupils who have attended 20 or more sessions will show a two-month increase in their reading vocabulary, reading comprehension and math achievement."

THE PROGRAM

Information for this section was gathered through interviews, running process records of 10 to 35 minutes made in each classroom observed, and through use of several analytical instruments.

The 1972 summer program varied according to the schools and individuals involved but the emphases on reading and mathematics was constant. Students represented a wide range of needs, abilities and languages. English, Spanish, Greek, Italian, Arabic and French were the languages represented.

Students needing remediation in reading and mathematics were encouraged to enroll by their regular school year teachers. However, the program was open to all children in the community. Notice about the program was posted in nearby parochial schools and other neighborhood facilities. Parents were notified by mail.

In some schools registration of parochial school students ran very high. Principals indicated that the crowded conditions in some parochial schools may have been a factor in this summer enrollment.

Most schools emphasized heavily the remedial modes of reading and mathematics. Principals described the program as including activities titled "enrichment." These included dramatics, art, music, dance, trips, and ethnic cultural experiences. Most programs included a bilingual class for Spanish speaking children.

CLASS GROUPING AND SIZE

Most classes were grouped on the basis of reading and mathematics achievement scores. Reading scores carried the most influence. A small number of classes included children with widely varying achievement scores. Most children spent the bulk of each day with a teacher and an auxiliary personnel team. Some schools were departmentalized. In these, students worked with as many as five different adult groups each day.

Classes observed ranged from four to thirty pupils in attendance. Principals attributed this variance to several reasons. Among these were weather conditions, other competitive programs and program recruitment practices. That attendance was an issue of concern to principals is attested to by the fact that so many of them mentioned it spontaneously. It is probably that the link between attendance and program funding heightened that concern.

Due to the departmental nature of some classes, visits to these schools found the children in various groupings. This included separation into smaller groups which met in different rooms.

AUXILIARY PERSONNEL

Teaching Assistants

Adult-child ratio varied greatly among classrooms. Some classes had as many as three paraprofessionals, each working with a small group of children. Generally, both teachers and paraprofessionals worked with children, while teachers oversaw and directed the entire process. However, 31% of the time paraprofessional staff were not engaged in interaction with children. In most of these cases they were sitting in the rooms while the teachers directed activities.

Educational assistants were recruited in several ways. Some were on the regular school year staff and so heard about the program. Some applied to the central Board of Education office. Some were recommended by community groups. Some responded to a letter inviting them to apply. Several had interviews with principals and other staff when they were not known in the particular school involved.

When principals were asked to recommend ideas for future recruitment of educational assistants the largest response centered about the necessity of finding interested and able people. When asked their views of paraprofessional roles, principals replies ranged from "part of a team" to "to be used by the teacher." Most said that educational assistants were a valiable asset for individualizing instruction.

In most cases teachers were in charge of and totally responsible for overall planning. They directed the actions of educational assistants and distributed tasks. Cooperative planning was observed once.

Tutors

Tutors in the summer program were high school students. There were

three kinds of situations in which the tutors worked every day: tutoring-rooms with several tutors and students working at once; classrooms in which the tutors were with the same class group all morning; and classrooms in which the tutors' clientele came from two or three classes of students in that many teaching periods. In the first situation, tutors each worked with students in either mathematics or reading or in reading remediation alone. In five schools, tutors worked one, two, or three in a class given over mostly to reading and mathematics remediation, and in a Spanish-culture class, two tutors worked with individuals or small groups in the social studies areas, as well as in the bilingual reading and mathematics remediation. In one school, the tutor helped individuals or groups up to eight in number in a room to which three groups of students came for mathematics in different periods.

Tutors got their jobs in one of three ways: through hearing about it from a relation or friend in the school, and by applying at the school; by applying on a form through the central Board of Education office or the district office; or by getting the job through the Neighborhood Youth Corps. A few of the tutors had close working relationships with the principals and discussed problems and progress with them; most had a once-a-week session with other tutors and the principal, vice-principal, or a teacher whose summer assignment was to help out the tutors. In these sessions administrators presented materials and methods. In a few cases the tutors had working relationships only with the students, teachers, assistants and other tutors. In at least two schools, the kind of job which the educational assistant and the tutors performed was the same by description. In practice, the work done varied as the

enthusiasm and skill people brought to it. Some of the tutors seemed to perform as energetically and effectively, judging from short observations, as some of the assistants.

Tutors brought a great deal of positive worth to the situations. They seemed to enjoy being and working with the students in their classes. In two classrooms, tutors seemed rather overwhelming as they went from person to person as students asked for specific help in solving particular problems in a mathematics workbook. In several cases, the tutors posed their own problems, watched as the students worked them out, and then posed other problems that had something to do with correcting or building on the process that had been undertaken in the first place. One tutor did this so intently and for such a long time with two students that the interviewer could find no satisfactory time to speak with her. Several tutors separately agreed that the teachers in the room gave them specific books and pages in workbooks to use for mathematics problem-solving or reading remediation, however, what they did with the results of the students' work was up to them. They were free to ask questions, pose problems, and provide clues for phonics work. Two tutors planned daily with their teachers and educational assistants. In one school with the tutoring-room approach, at least one teacher required the tutors to spend half of their tutoring hour in that classroom and then to work the next half-hour with the pupil according to what had been the subject and method of the class session. In nearly all other cases, tutors said that they spoke frequently but informally with their teachers and/or the tutor-directors in the tutoring-room set-ups about what they were doing. They indicated that they would go to the teachers if they needed help. In one case, the tutor said that

she did not spend much of any time speaking with the teacher but was working nearly independently in the classroom. Most tutors seemed determined to keep being useful to the teachers and students throughout the morning; several found work to do in lulls.

In two schools where there were tutoring-rooms, the tutor-directors arranged for mechanical and other physical materials for the tutors to use with their tutees. During observation these materials were seen in use. One tutor had found a child with an insatiable wish to read about Martin Luther King, Jr., and had ventured out to libraries on her own to find books on other civil rights work in an attempt to broaden the child's interest and to keep her reading. In several other schools, tutors got some materials and help in using them from those teachers who were regular teachers recruited for the summer. In teaching style, tutors seemed to follow the cues of their classroom teachers. In formally organized rooms, tutors were more formal than in rooms where teachers set up informal atmosphere and communications.

Many of the tutors had graduated from the elementary school in which they were working for the summer this seemed to put them at ease with the students at the start. Many still lived nearby the school and saw the students every day after class. Several tutors knew their students quite well. In at least four cases, neighborhood adults had guided tutors into the tutoring job and in one school, the principal had asked some parents to recruit some high school students they liked and would trust for the jobs.

One tutor said that he would have liked background information on the students with whom he would be working so that he would know the kinds

of problems with which he would be dealing. He felt that this information would have been helpful to the teachers as well. Another tutor said that the position demanded a great willingness to work with the teacher and students so as to make the class work out successfully and keep it a good group situation. Some tutors who did not get any special or organized tutoring seminars thought that it would be good to have such sessions amongst themselves, to compare work and thinking and to get information and help from each other and from regular staff members.

MATERIALS

Listings were made of available materials such as books, games, learning packages and art materials during each classroom observation. The kinds of materials and their availability to children were considered important variables in program quality.

When compared to the material listings of summer 1971, the 1972 program included more in number. This may have been due in part to the fact that more principals and teachers were working in their home base. Many of these people used materials from regular school year.

The use of material was teacher controlled 90% of the time. This control was both direct such as the teacher calling on two children to use the puzzles and indirect such as having the paints on a high shelf. In most cases children were give no responsibility for choosing and using materials.

The most commonly used materials were worksheets and books. Painting was observed in one classroom. Makuhi bamboo rods were used in two. Cuisinaire rods were available in one classroom as was a film strip. Games and puzzles were seen in several rooms. No child-made materials were seen.

Manipulative materials were observed infrequently in use. In several cases the use of such materials seemed essential to the learning experience. One example of this was a lesson in division where the words were about money. It seemed natural that real or play money be used yet the lesson relied solely on lecture for communication. The abstract approach rather than the concrete predominated in most classrooms.

TEACHERS

Teachers in the summer program represented a wide range of ages were male and female, Black and white and Spanish and English speaking people

Recruitment of teachers began through publicity and word of mouth. Principals indicated that the largest number of people were hired because of retention rights and approval of principal. Two principals mentioned that members of the Parents Association helped in the hiring process. Several teachers applied to the district Board of Education office which facilitated the hiring process.

The largest group of recommendations for future hiring procedures was about changing the criterion of retention rights to one of ability and service to children. This included two mentions of a need for altering the districts' contract with the United Federation of Teachers Union. Several principals indicated that they should have final decision responsibility for hiring teachers. Several principals indicated that they were satisfied with present procedures and had no recommendations for change.

TEACHING MODE

The mode of teaching in the 19 classrooms observed was 52% whole group and 46% small group, each directed by an adult. A small group working by

itself without an adult directly in charge was seen once.

In most situations, while they were seated as part of a large or a small group, children were interacting solely with the adult in charge and not with each other. The levels of quiet and obedience was striking. Adults did much telling. They directed children to work alone. Worksheets were used in a large number of instances.

One teacher observed in a whole group mode was extremely responsive to the individual needs of children. He did diagnosis on the spot and changed his approach with several children. It seemed to the observers difficult for others to do this. The problem solving approach was seen rarely. This might have been because staff knew the summer program was remedial in large part and felt that such approaches which require transfer of many responsibilities to children were too time consuming given the tasks to be accomplished.

Teachers, principals and other staff gave heavy mention to individualized instruction. They felt that the summer program afforded opportunities to put such instruction into practice. Here may be an objective that staff may consider for future programs.

SOCIAL-EMOTIONAL CLASSROOM CLIMATE

The social-emotional climate is created by those behaviors which predominate in most teacher-pupil contacts. The research suggests that there is a link between classroom climate and the amount and quality of children's learning in both cognitive and affective domains and that learning and "learning how to learn" skills are affected by the climate factor.

Observation of 10 to 30 minutes were made in 19 classrooms using

John Withall's Social-Emotional Climate Index (see Appendix A) with the following total results:

TABLE XVII

SOCIAL-EMOTIONAL CLIMATE

Teacher Statement Categories	Coding Totals	Percent
1. Learner Supportive	29	6.8%
2. Accepting or Clarifying	44	10.2%
3. Problem Structuring	53	12.3%
4. Neutral	18	4.2%
4a. Perfuntory	39	9.1%
5. Directive	181	42.1%
6. Reproving, Disapproving or Disparaging	58	13.5%
7. Teacher-Supportive	8	1.9%

Coding results seem to echo the general description of classoom interactions. Category 5, Directive received most of the weight. This seems reasonable in light of the definition for that category, which includes such statements as "These statements recommend to the learner the facts and procedures that the teacher offers him" and "The intent of these (directive) responses is to have the learner take up the teachers point of view and pursue a course of action she advocates."

An examination of totals for categories 1, 2, and 3 which Withall labels the learner centered statements shows that these were used almost 30% of the time.

No evaluative judgment can be made about the bulk of teacher-centered

statements. This is best done by all staff involved as they plan for ensuing programs. Some central questions might be: Does remediation admit learner centered classrooms? What is the districts definition of individualization and does it have a place in such a summer program? What would be the result of more child centered classrooms on testing scores? If more individualization and more child centered activities are indeed desirable how can the growth that has already begun be encouraged?

LEVEL OF TEACHER QUESTIONS

In addition to an analysis of classroom climate the evaluation team focussed in on the levels of questions that teachers asked. Teacher questions are sensitive indicators of the kinds of thinking required of children. Questions can limit thinking to recall only or spur children on to create new solutions to per lexing problems. For this evaluation an analysis of questions was made for fifteen minutes in each of nineteen classrooms. Theodore Parson's Categories were used. Please see Appendix B for category definitions. Table XVIII presents coding results:

Table XVIII

TEACHER QUESTIONS

CATEGORIES	Coding Totals	Percent
1. Rhetorical	11	4.2%
2. Information	135	51.4%
3. Leading	110	41.8%
4. Proving	2	.8%
5. Other	5	1.9%

The large majority of questions coded were "information" that demanded recall and "leading" that provided clues to students about the appropriate answers. These results support both the description of classroom activities and the Social-Emotional Climate analysis.

The 1972 data on questions used differs from the 1971 totals in that there were many more "leading" questions this year. This may be due to real differences or to the fact that different classroom interactions were coded this summer.

The lack of weight in the "probing" category indicates that during the observations children rarely were asked to generate concepts or principals, explain relationships or apply known concepts, principles, or rules to the analysis of new information.

UNIQUE ASPECTS OF PROGRAMS

Information for this area was gathered through observations and questionnaires. The following list is composed of aspects, principals, staff, and evaluators saw as different in the programs. "Different" may be positive or negative for children so no overall statement of worth is made about the items:

1. Report Cards
2. Makahi
3. Open Classrooms
4. Departmentalization
5. Audio-visual Classes
6. Talking Story Books
7. Cuisinaire Rods
8. Math and Reading Kits

9. Teacher Made Materials
10. Parent's Room
11. Bus Trips

TESTING RESULTS

The stated program objective was: "Seventy percent of the pupils who have attended 20 or more sessions will show a two month increase in their reading vocabulary, reading comprehension, and math achievement."

The California Achievement Test was administered to a random sample of children. Form A was used at the beginning of the summer session and Form B at the end. Third and fourth graders were given Level 2 of the CAT and fifth graders took Level 3.

Third and Fourth Graders

The amount of growth made by third and fourth graders on tests is shown on Table XIX. The mean growth of 2.54 months in mathematics was significant at a high level of confidence (.0009). The mean growth of 1.6 months in reading comprehension was not significant. The mean loss of 2.8 months in reading vocabulary was significant. While this latter one was of statistical significance it must be questioned at a common sense level. It does not seem very reasonable that children's vocabulary would regress in the mean of three months during a two month summer school designed specifically to help them improve language skills. Was the test not sensitive? Did some variables in the programs indeed cause a loss of vocabulary skill? Were testing situations detrimental to the vocabulary portions of the test and not to others?

Again, while the mean gain of 1.6 months in reading comprehension was not statistically significant it did come close to the two month growth

goal set for seventy percent of the children and so is considered a positive result.

TABLE XIX

TESTING RESULTS LEVEL 2
GRADES 3 AND 4

	N	Mean Pre	Mean Post	Difference	SD(D)	t	Significance	
Vocabulary	92	2.79	2.54	-2.5 mo.	.78	-3.14	.0026	Significant Loss
Comprehension	92	2.65	2.81	+1.6 mo.	1.08	1.43	.1525	n.s.
Mathematics	97	2.66	2.94	+2.8 mo.	.77	3.6	.0009	Significant

In order to examine more specifically the data results for third and fourth grades a breakdown was established for each school showing the mean differences in vocabulary, comprehension, and math scores for pre- and post-tests. These data are presented for a view of overall patterns rather than as a base on which to evaluate the success of each individual school. For such a task the number in the samples must be considerably larger than those used. It would be ungrounded, and therefore unfair, to make generalizations about each school from such small populations. The schools in Table IV are in random order:

In vocabulary results, four out of fourteen schools showed gains or no differences from pre- to post means. Among these were both the school where children produced the highest pre-test mean on vocabulary and the school where the pre-test mean was lowest. These schools showed no difference from pre- to post-means. Ten school means declined from pre- to post-test.

TABLE XX

MEAN DIFFERENCES FOR INDIVIDUAL SCHOOLS
GRADES 3 AND 4

		VOCABULARY			COMPREHENSION			MATHEMATICS			
		Means		Diff.	Means		Diff.		Means		Diff.
School	N	Pre	Post	(Months)	Pre	Post	(Months)	N	Pre	Post	(Months)
1	8	3.7	3.2	-4*	2.6	3.5	9	8	2.8	3.2	4
2	10	3.0	2.7	-3	3.0	2.9	-1	10	2.6	3.0	4
3	7	2.6	2.5	-1	1.8	3.2	14	9	2.6	3.1	6*
4	12	2.7	2.0	-7	2.0	1.8	-2	12	2.4	2.3	-1
5	6	2.4	2.0	-4	2.6	2.1	-5	6	2.2	2.6	4
6	7	2.8	2.7	-1	2.4	3.2	9*	8	2.3	3.5	11
7	4	2.4	2.7	3	2.6	2.5	-2*	4	2.9	2.9	1*
8	6	3.2	2.5	-7	2.8	2.9	2*	6	2.7	2.6	-1
9	10	2.2	2.2	0	2.6	2.9	3	10	1.9	2.1	2
10	5	1.9	1.9	0	2.6	2.9	3	7	2.4	2.8	4
11	3	3.5	3.1	-4	4.0	2.4	-16	4	4.2	3.1	-12*
12	5	2.9	2.5	-3*	3.3	3.4	1	5	2.9	3.4	5
13	4	4.1	4.1	0	5.5	5.5	0	4	5.0	5.2	2
14	4	2.6	2.8	2	3.6	2.7	-9	4	2.5	2.9	4

Vocab Range Pre 1.9 to 4.1
Vocab Range Post 1.9 to 4.1

Comp. Range Pre 1.8 to 5.5
Comp. Range Post 1.8 to 5.5

Math Range Pre 1.9 to 5.0
Math Range Post 2.1 to 5.2

*These are corrected differences. The seeming discrepancy between pre- and post-means and the expected differences are due to the fact that means were rounded off to the nearest tenth.

In comprehension eight school means showed gains and six showed declines in means. In math, eleven out of fourteen schools established higher means on the post-test.

Three schools averaged gains or no difference in the three areas of vocabulary comprehension, and mathematics. All other schools showed at least one decline in means from pre- to post-test.

When the pre-test mean ranges in the three subject areas were examined it became clear that the sample groups differed insofar as the children tested differently at the beginning of summer school. In vocabulary, for example the pre-test mean range ran from 1.9 for one school to 4.1 for another. Children's growth then, became a more important indication of success than school system wide averages.

It was difficult to discern stable patterns in growth. For example, the highest rate of growth in each of the three areas was made by children in schools whose means were lower than grade level (2 4, 1.8 and 2.3). This would suggest the premise that upheld the summer program, i.e. the idea of helping children who tested lower than their grade level to boost their testing results. On the other hand, the generalization that schools with lower pre-test means gained the most did not hold up. In several cases two schools began with the same or similar pre-test means while the post-test rose for one and declined for the other.

On test score change the schools with the first and second highest beginning means did not show the most gains. This seems sensible in one way and a caution in another. It may be that these children were too near the top of the test limit to begin with. It may be that they learned things

that were not tested by the CAT. It may be that the programs need to be revised and individualized so that all children can make maximum gains.

Both pre- and post-test scores were obtained from 92 children. Pre-scores only were obtained from 65. These either dropped out of the program or were absent excessively. Tests of significance were applied to the pre-test scores of the 92 children who remained and the 65 who eliminated themselves from the data pool to ascertain if these groups were similar or beginning test results or different. This was done so that post-test scores could be viewed in light of the group that remained.

No significant differences were found in the pre-test scores for comprehension and mathematics. A significant difference between the 92 and 65 children was found in the area of vocabulary. The 65 "dropouts" averaged significantly lower on pre-test vocabulary scores than did the 92 who remained. The children who did most poorly in vocabulary at the beginning of the program did not stay with it. Here may be a direction for further district consideration. If the situation really existed, what changes in curriculum and teaching need to be instituted to keep these children attending and learning?

Fifth Graders

Fifth graders achieved significant gains at high levels of confidence in the three areas of vocabulary, comprehension, and mathematics.

A sample of 234 fifth graders gained 5.3 months on the vocabulary test and 3.0 months on the comprehension test. Gains made by 202 children in mathematics scores averaged 5.6 months. These were substantial gains.

TABLE XXI

TESTING RESULTS LEVEL 3
GRADE 5

	N	Mean Pre	Mean Post	Difference	F	Significance
Vocabulary	234	3.37	3.90	5.3 mo.	41.6	.0001 Significant Gain
Comprehension	234	3.58	3.88	3.0 mo.	10.5	.0018 Significant Gain
Mathematics	202	3.66	4.22	5.6 mo.	33.1	.0001 Significant Gain

No specific school breakdown is presented here because of the large overall gains. In the area of vocabulary twelve schools showed growth and three declined in mean score difference from pre- to post-test. In comprehension, ten schools gained and five declined. In mathematics, the number of schools with post mean gain was ten and post mean decline was four. The decline scores in all three areas were scattered among schools. In only one case did one school's scores decline across the board in the three areas. The sample in this school was miniscule with four children providing scores for math and two for vocabulary and comprehension, and therefore the results are questionable.

It would be useful to know how the children continue to grow during the coming school year. Did they make "paper gains" or did they in fact grow well enough to continue the upward momentum? What can be done to help children capitalize on their real summer gains?

Tests of significance were applied to the pre-test scores of fifth grade children who provided both pre- and post scores and those children who supplied pre-test scores only. No significant differences were found

for the two groups in vocabulary, comprehension, and mathematics. From these results it can be concluded that so far as pre-test means were concerned the fifth graders who "dropped out" were not significantly different from those who stayed in the program.

Test results for Level 2 and Level 3 indicated a significant growth in most variables for the children sampled in third fourth, and fifth grades. While these are positive findings, how and how much the district can increase learning is the next question that must be answered. The following recommendations are posed as suggestions toward finding a part of the answer.

The following recommendations stem from evaluation findings reported and from a large number of statements made about the desire to move toward individualization and interesting programs for children:

It is recommended that:

1. Early and varied recruitment procedures be used so that the program attracts the children for whom the program is specifically designed.
2. The involvement of community people in recruiting, planning, and working in the program be continued.
3. District publicity about future programs to recruit teachers and other staff describe the curriculum strategies, grouping plans, and desired teaching behaviors to meet the needs of the children involved.
4. Applicants for teaching and other staff positions be seen on the job in as many instances as possible to ascertain their present teaching modes before they are hired.

5. Several orientation sessions be held before the program begins as a requirement for all staff. That sessions include opportunities for adult team members to learn about and examine supporting roles and to plan for district responsibilities.

6. Ongoing training sessions be established for all staff personnel twice a week during the program. That such sessions include:

   a. time for principals, teachers, educational assistants, tutors and other personnel to share inter and intra group;

   b. opportunities for teaching teams to re-examine their roles and functions and make teaching plans based on these;

   c. opportunities to examine aspects of indirect teaching, use of questions to lift thinking levels, use of non-verbal communication skills, varying grouping procedures and group and individual planning;

   d. opportunities to learn some aspects of self evaluation such as systems to analyze questions and the use of video for self or team evaluation and planning;

7. Principals and other administrators take part in training sessions and that supervision be based on the goals and strategies that have been accepted by the staff and emphasized in the training sessions.

8. Experts on human relations and group process be involved in training sessions before and during the program.
9. The tutor segment of future programs continue to be supported and that tutors take part in all training sessions before and during the program.
10. Program staff examine the meanings of individualization and define how this concept would work in summer school. Seating children in small groups was a positive step but not a guarantee of individualization. The next step can be building specific tasks for and with children to meet their specific needs.
11. District staff support the goal of problem-centered, process oriented education for future programs and that a variety of strategies be determined to help adults facilitate children's learning and retention. This recommendation is not meant to put all teachers into the same mold. Rather, there is room for wide variation in experiences.
12. More real experiences be provided children in and outside of classrooms so that learning can have maximum meaning. This could range from making lemonade in a classroom to photographing the community and writing books.
13. A variety of reading related activities be included in future programs such as dramatics, puppetry, story telling, typewriting, story writing, pantomime, film making and song writing.

14. Child to child participation be encouraged and planned so that interactions are less in the child-teacher-child-teacher pattern.
15. Trips be the logical outcomes of curriculum activities and that children and teaching staff bear major planning responsibility for trips.
16. The construction and use of child and adult made manipulative materials be actively encouraged.
17. Materials be so planned and placed that they encourage children's self initiated use.
18. More heterogeneous classes be established on any criterion and that growth be evaluated by a variety of testing and non-testing procedures.
19. Diagnostic information be gathered about each child attending before the program begin, and the information used to plan a tailor made program to meet the child's needs and to evaluate his progress.
20. Future program evaluation be planned at the same time the program is planned.

SECONDARY PROGRAM

General Description of Program

A summer Junior High Program operated from July 5th - August 11th at I.S. 88, I.S. 293, J.H.S. 136, J.H.S. 142, and J.H.S. 51, for a total of thirty sessions. Approximately 2,000 children from the secondary schools of District 15 and from the non-public schools in the Title I area of District 15 were accepted for enrollment.

In four of the five schools, the four-hour school day was divided to permit three course offerings, whereas one school, J.H.S. 51, used modular scheduling. Registration priorities went to those students who had failed two or more subjects. Credit courses included language arts, mathematics, social studies, and science. Non-credit courses included corrective reading, corrective mathematics, typewriting, English as a second language, and expressional writing. Also offered, were creative arts and enrichment subjects -- photography, drama, music, art, journalism, and industrial arts. Table I presents a school-by-school breakdown of course offerings. In some schools, credit and remedial courses were offered separately.

Though the programs were similar, they differed in scope, approach and emphases. In effect the individual programs reflected varying student needs and requests, parent requests, availability of skilled personnel, and plant facilities.

All schools offered a drug counseling program which was a continuation of the district wide program in effect during the regular school year. Trained street workers were available to work with students from 9-1 daily.

Library services were available in all schools and the library was

TABLE XXII

COURSES OFFERED AND NUMBER OF CLASSES FOR EACH COURSE

Schools	Course Offerings	Number of Classes
I.S. 293	Reading EDL	3
	Reading Skills Center	3
	Reading Project Read	3
	Mathematics Laboratory	5
	Science	3
	Spanish Beginners	1
	Spanish Advanced	2
	Bilingual	3
	Arts and Crafts	6
	Sewing	3
	Photography	3
	Rhythm Band	2
	English	1
	Social Studies	1
	Drama Workshop	1 (from 9-1)
	Computer	1
I.S. 88	Reading	8
	Mathematics	6
	Social Studies	3
	Science	3
	English as a Second Language	1
	Sewing	6
	Shops	4
	Drama	1 (from 9-1)
	Journalism	1 (from 9-1)
J.H.S.	Mathematics Lab	3
	Science Lab	3
	Dance	3
	Computers	3
	Fine Arts	3
	Future Teachers	3
	Science	3
	Language Arts	4
	Reading	3
	Social Studies	3
	Math	4

Schools	Course Offerings	Number of Classes
J.H.S. 136	Journalism	3
	Theatre Arts	1(from 9-1)
	Reading	3
	Science	3
	Mathematics	3
	Woodworking	3
	Printing	3
	Jewelry	3
	Ceramics	3
	Photography	3
	Arts and Crafts (electronics)	3
J.H.S. 51	Language Arts	3
	Mathematics	3
	Science	2
	Social Studies	2
	Script Writing & Film Making	2
	Photography	4
	Science Exploration	1
	Arts & Crafts	3
	Ceramics	3
	Theatre Arts	2
	Remedial Reading	3
	Remedial Math	1
	Creative Writing	1
	English as a Second Language	1
	Typewriting	3

fully utilized during the entire school day. In addition, all schools offered a lunch program, provided 11 A.M. snacks, and supplied tokens to students living one mile from the school.

Every school was visited at least two times and all classes were visited in order to note the implementation of the program. Site visits were used to record the conditions in the on-going programs in respect to physical facilities, materials, planning, teaching procedures, and the functioning of teachers and pupils in the program.

Staff

See Table XXIII.

Attendance

The average daily attendance of all registrants must be considered good. A school-by-school comparison seems inappropriate because of the different course offerings in each school, the ventilation problems in the older schools, and the pupil population - the number of students making up failures as opposed to the number of students attending enrichment classes. Students not enrolled in credit courses were not compelled to attend classes and many took a few days off because of the heat, for family vacations, or for other activities.

Physical Facilities

All schools provided adequate areas for activities although many classes were oversubscribed. On very hot days, classrooms in the older schools were unbearable due to poor ventilation and overcrowded conditions. At a later point, specific problems will be discussed as they relate to individual schools.

TABLE XXIII

STAFF

School	Staff
I.S. 293	Principal 18 Teachers 9 Parents 5 Aides 3 Neighborhood youth corps workers 1 Secretary
I.S. 88	Principal 12 Teachers 5 Aides 6 Educational Assistants 1 Secretary 10 Neighborhood youth corps workers
J.H.S. 142	Principal 12 Teachers 1 Secretary 6 Teacher Aides 5 School Aides 10 Youth Corps workers
J.H.S. 136	Principal 12 Teachers 5 Aides 6 Educational Assistants 1 Secretary
J.H.S. 51	Principal 12 Teachers 6 Educational Assistants 5 School Aides

Teacher Planning

Teacher planning and outside preparation appeared to be extensive particularly in courses that involved project work. In addition to lesson preparations, many teachers had to set up equipment, as for example: slides and microscopes for science; audio-visual equipment for lessons; materials and equipment for sewing, shop, and art classes. This meant that teachers spent a considerable amount of time in addition to the four hour day of classes without any breaks. In spite of these handicaps, teachers were enthusiastic about their programs and were, for the most part, successful in communicating this enthusiasm to the pupils.

Trips

Another component of the program was an academic and cultural trip program designed to dovetail the program offerings and emphases. For a school-by-school breakdown, see Table XXII.

Specific Programs and Problems

I.S 293 - The program at I.S. 293 was designed for pupils in grades 6-8 and though 550 students registered for classes, the average daily attendance was approximately 350 students.

Course offerings were extensive as was the range of materials used. The reading program, essentially remedial in nature, utilized EDL and Project Read. In addition, there was a Skills Center which had a wide variety of commercial and teacher-made materials. The levels of materials were suitable for students' reading ability and the interest level was appropriate to pupils' age and maturity. Activities were

tailored to the individual child - his interests, his strengths, and his weaknesses - and emphasis was on individual and small group work.

The mathematics lab was also basically remedial in nature. Individualized Sullivan programmed materials were used along with SRA materials which included cassettes and work books. Additional reinforcement was provided through the use of calculators. This three-pronged approach was used in order to keep interest high and provide students with different kinds of reinforcement.

The science classes were designed for remedial as well as enrichment purposes. Students used microscopes, slides; and the emphasis was on seeing and doing. As many activities as possible were turned into fun instead of straight hard work in a friendly and encouraging learning environment.

Three Spanish classes were offered: one for beginners and two for more advanced students. The bilingual classes were composed of Chinese, Spanish, Arabic and Italian students. In order to keep levels of concentration high, the day was divided so that students spent part of their time, as a group, working on manipulative skills in arts and crafts.

In addition, arts and crafts, sewing, photography, rhythm band, English, social studies, drama workshops, and a computer course for advanced students were offered. For a complete listing, see Table XXII.

For the enrichment component of this program to function at optimum level, additional aides are necessary. For example, with over 30 students in a sewing class, students had to wait their turn to use the sewing machines. However, with additional help, equipment from the other sewing classroom could be utilized as well. In much the same way, arts and crafts teachers could better meet the demands of students in oversub-

scribed classes if they too had additional help. For one thing, aides could prepare materials which, at present, are prepared by the teachers before 9 a.m. or after 1 p.m. It might also be wise to have the principal personally select a certain percentage of aides from the community, perhaps former students who are now attending college and who have specific expertise in needed areas.

In the same vein, if individualized instruction is a goal of the academic program then additional help is imperative. Along with this emphasis on the need for a greater number of aides and assistants, it should be pointed out that for all teachers involved in the program, the working day is longer than specified. For example, it should be noted that the library is open for an additional half hour, and the lunchroom is staffed by volunteer teachers to ensure the smooth running of a program which services 400 youngsters.

For many on staff, besides an investment of additional time, there was also a financial investment. In the first week alone, Mr. Yermach laid out $216 from his personal account to meet the daily needs of the program. Teachers too bought needed supplies for sewing, photography, and arts and crafts classes. It seems reasonable that fluid funds should be available so that daily expenses can be met and the ordering and receipt of materials can occur before the program begins.

At I.S. 293 students were pre-registered in order to allow for a full day's program on the first day of school. This required extensive preparation with no recompense for personnel. In all fairness, a 3-day paid planning period seems necessary to insure a smooth-running, well-planned program.

Lastly, at this school, a professional security guard is needed. Here an aide or youth corps person cannot effectively do the job.

I.S. 88. The program at I.S. 88 was designed for pupils in grades 6-8. The average daily attendance ran about 275 pupils out of an enrollment of 375.

In the reading program, which was essentially remedial in nature, each child's reading difficulty was diagnosed at the beginning of the program and appropriate materials were prescribed to raise student's reading to grade level. SRA and IRT materials were used extensively, as were teacher-made materials. The emphasis was on increased comprehension, word attack and word perception skills. Differentiation was made between instructional level and independent level materials, both of which were of sufficient quantity. Space was available for individual and small group work.

The mathematics class was divided into two groups so that learning and teaching could be highly individualized. Commercial texts as well as teacher-made materials were used almost exclusively. The climate created by the teacher was learner supportive and much time was spent in moving from child to child to clarify the material being used.

Science classes had an uneven distribution of students due to programming problems, and one class had an enrollment of 46 students. The physical layout of the plant coupled with the lack of aides meant that much of the equipment could not be used. For example, it was a physical impossibility for the teacher to set up materials and equipment, teach for four hours without a break, and transport microscopes from one floor to another.

English as a second language was a self-contained class composed of

Spanish, French, and Slavic speaking students. In order to eliminate boredom which would have set in over such an extended period of time, the day was broken up in such a way that part of the time was spent in the library or on short neighborhood trips with the aim of reinforcing language skills.

In drama, students made live films, cartoons, and a combination of the two. Clay animation was also planned. The group made a film on drugs and a documentary on the recycling of materials which would normally be thrown away.

Two editions of a newspaper were published by the journalism class. One edition contained suggestions about "things to do" in the N.Y. area for little or no money. This was accomplished vis-a-vis field trips undertaken by the students enrolled in the course.

Sewing and shop classes were oversubscribed. One sewing class had an enrollment of 60 students. It certainly seemed reasonable to this evaluator that additional help was warranted. The same was true for the shop classes where students were involved in a variety of projects which included the use of plastic, glass and wood.

It should be noted that in addition to a full library program, the librarian trained a library squad composed of interested students. For a complete listing of courses, see Table I.

To make a good program even better, it is recommended that in this school, a homeroom period of half-hour duration be incorporated into the four hour schedule. This would allow for completion of clerical work and if the shop, science, and sewing teachers were relieved of homeroom responsibilities, it would give them the necessary time needed to set up materials and equipment.

It is further suggested that the number of aides and educational assistants be doubled. This would ensure optimal conditions for high levels of teaching and learning. It would also decrease the teacher-student ratio and allow for a more individualized program. Furthermore, if one or two aides served as floaters, oversubscribed classes would not be such a severe problem.

Unique to I.S. 88 was the Vacation Day Camp which in this evaluator's opinion should begin when the school day ends. To accomplish this without too much hardship for either program, it might be advisable to begin the summer program earlier. This appears to be absolutely necessary because the school has no playground facilities and the campers had to use the inner courtyard. The noise made by this group was extremely distracting to youngsters working on academic subjects and caused a certain amount of understandable disruption.

As in other schools, funding was a serious problem. As much as $300 had been laid out from personal monies.

Pre-registration of students at I.S. 88 allowed for a smooth running program on the first day, but this preparation required about three days of work for which staff was not reimbursed.

J.H.S. 142. J.H.S. 142 offered academic credit courses for grades 6-8 and enrichment courses for students in grades 6-9. Approximately 250 students were enrolled and the average daily attendance ran around 200 students.

The program was housed in an old, unattractive building that had poor lighting and ventilation. Certainly, the climate created by the physical setting affected how children felt within that setting and

subsequently how they felt about learning. Yet, in spite of these handicaps a well-planned program was operating.

Materials used in the reading program were primarily SRA, IRP, and teacher-made. Language Arts classes utilized commercial materials which included texts, workbooks, magazines, newspapers, filmstrips, and content-area materials.

Math labs emphasized the use of assorted grade level tests, workbooks and teacher-made/student-made materials with an eye toward individualizing instruction as much as possible. Some academic math classes were oversubscribed, with as many as 30 students. Considering the physical condition of the school, this was not a realistic enrollment.

A computer course was offered in which students learned typing and the use of calculators. About one-half of the typewriters had not been repaired from regular school-year breakage, and in some classes there were more students than working machines.

A Future Teachers Course, also offered during the academic year, was available to students who were interested in a teaching career. The emphasis was on training students to work with tutees in mathematics, reading, and language arts. In addition, the students planned a community drive to help raise funds for sickle-cell anemia.

The Fine Arts Program, though oversubscribed had enough materials and aides. It was suggested that class assistants should be chosen by the teacher in charge in order to ensure that the most skilled and most deserving students be afforded this position.

For a complete breakdown of courses see Table XXII.

J.H.S. 136. J.H.S. 136 serviced students in grades 6-9, and had an

enrollment of about 210 students with the average daily attendance ranging between 150-160 students.

Twelve courses were offered in the program. In this particular school, there was a wide variety of enrichment courses offered which required an assortment of materials and equipment. A flexible money allotment was a necessity here and, because of the course offerings, it might have been advisable if money allocated for texts could have been used for necessary material. For example, the program offered courses in woodworking, printing, jewelry, arts and crafts, electronics, ceramics, and photography. For a complete listing of courses, see Table XXII.

Because the program had such a heavy emphasis on project oriented classes, fluid funding was an absolute necessity. Furthermore, time should have been allocated for planning projects and ordering materials and equipment. In many instances teachers were forced to place last minute orders, pick up materials from the warehouse, and pay for the materials out of their own pockets. This seemed both unnecessary and unfair. Staff should be paid for time needed to plan a program, and a minimum of two weeks should be allowed for the ordering and receipt of materials -- which should be paid for out of project funds.

As in the other schools, the principal, Mr. Le Winter, laid out funds from personal monies to pay for tokens, juices, etc. The outlay for the first week alone totaled $116. In addition to recommending that these funds be made available as needed, it is further recommended that time and funds be set aside for pre-registration purposes in order to ensure a smooth-running program.

A point should be made about course offerings which required students

to own particular equipment. Photography, would be a case in point. Although some students wanted to take this course, they were unable to do so because they did not own or have access to a camera. If courses such as these are to be offered, provision should be made to supply students with the necessary tools. Discrimination of this kind does not appear to be educationally sound.

Non-project courses included math classes which emphasized the use of texts and teacher-made materials; a reading program which utilized programmed materials, SRA, teacher-made materials, and games. The journalism class was social studies oriented and the publication of a newspaper was planned. The drama class, which met for four hours, was working on a comedy film sequence and a musical revue stage show. Science classes emphasized "doing" lessons rather than merely "showing" ones.

Educational assistants were needed in all the academic classes. The classes were large and if instruction is to be individualized, such staffing arrangements would be necessary.

Worth noting again is the fact that J.H.S. 136 is housed in an old building with poor ventilation. Additional help might enable the staff to thin out classes and thereby make both learning and teaching physically more comfortable.

J.H.S. 51. J.H.S. 51 served students in grades 6-8 and had an enrollment of approximately 345 pupils with daily attendance averaging 210.

The numbers and kinds of courses offered this summer, as opposed to last summer, better reflected student needs and interests. To counteract the truant and discipline problems, flexible scheduling was adopted so that the 25% of the student population that wanted to take only two courses

could do so. The day was divided into 6 modules and a student could, for example, elect to study ceramics for three modules and crafts for three modules. This scheduling allowed for accommodation to individual preferences for at least one-quarter of the population, although 75% chose to take three subjects.

One of the most exciting offerings was Photography. This was reflected in the original enrollment of 80 students which, by virtue of safety reasons alone, had to be cut to 50. With the idea of making this an on-going program, the investment in equipment was high this year. Cameras were bought so that all interested students could participate. Enlargers were also purchased -- and these will not have to be replaced yearly.

Working around a theme -- the community -- students learned how to take pictures, develop negatives, and print and mount photographs. Two classrooms were utilized, one served as a laboratory and was ingeniously set up. The windows were blackened and when the door was closed, students had one huge darkroom to work in under the guidance of two teachers.

But, as always, there is good news and bad news. What preceded was the good news. Now, for the bad news. There was no ventilation in this room -- at all. In addition, students were working with chemicals in 80^{o} - 90^{o} heat, where they required heat of about 70^{o} in order to produce photos of quality. Since this class was so popular and so well staffed, it is reasonable to suggest that an air conditioner should be rented for the summer for this laboratory. The observed student enthusiasm of wanting to "come to class" is enough to justify this recommendation.

The other classroom was used to teach the mechanics of photography.

Much free material, supplied by Kodak, was used for this purpose. For example, a complete course in "Slides" was taught using a kit which included a tape, and slides that synchronized with the tape.

Typing also was offered for beginners and advanced students. The advanced students worked on checks, telegrams, letters, purchase orders, etc. The typewriters, having been repaired at the end of the regular school year, were in good working order.

Ceramics and arts and crafts classes had enough supplies and a variety of projects were undertaken in both courses. It should be noted that students' work was attractively displayed in halls and classrooms. In spite of the fact that the school was old and poorly lit, these displays distracted from what could have been a drab and stark environment.

Science classes were divided in such a way that those who took it for exploration purposes, rather than academic credit, had the opportunity to perform dissections; do extensive work with microscopes; and with the use of the IPS program, students working in pairs, performed about 15 experiments. This entailed reading and planning, laboratory work, and commenting on observations.

In film-making and script-writing students produced two films shot in the neighborhood. They were involved in the entire process including screening, editing, and dubbing in the sound track. The results of students' work was displayed at an End-of-Program Art Fair along with the projects from other classes.

As recommended last year, where possible, academic classes were scheduled for early morning. The reading classroom, which had easy chairs and a couch, had a variety of materials and individual work was

prescribed based on the student's reading level so that he could work for a maximum period of time on his own and meet with success. A TV was available in order to view "The Electric Company." In addition, slide films were used, as well as SRA, IRP, BRP, Readers Digest Skill Builders, texts, workbooks, magazines, series readers, and library books. EDL was ordered but did not arrive in time for summer use.

Remedial as well as academic math was offered and materials used included SRA and Sullivan Programmed materials. For a full listing of course offerings, see Table XXII. English as a Second Language was offered for two modules and then these students elected to take other courses and did not stay together as a group.

The organization and implementation of the program reflected the amount and quality of planning that was done. Five or six meetings were held during the year, during which time requests for materials were submitted and money was budgeted accordingly. The whole operation was made easier because staff members were in their "home school," and all students were pre-registered.

It only remains to say that the staff could be paid for the time spent preparing for the program, a fair estimate being about three working days. Also, because of the large enrollment, the $350 allotment for snacks was not enough to last for the whole summer. For a good program to be even better, more educational assistants are needed. For example, for safety reasons alone, the ceramics teacher should have additional help because of the amounts and kinds of machinery used in the room. And finally, as in other schools, Mr. Acquilane laid out $300 from personal monies during the first week of the program alone. Again, fluid funding is essential

if this practice is to stop-- as it should.

EVALUATION

Program Objectives

The major objectives of the Secondary Program as outlined in the project proposal were as follows:

1. Upon completion of the project, eighty percent of the participants will have passed course requirements in Language Arts, Mathematics, Social Studies, and Science as measured by report card grades.
2. Upon conclusion of the project, seventy percent of the pupil population who have attended at least 20 sessions in classes to improve reading will have improved their reading vocabulary and comprehension by an increase of two months or more on a standardized reading test. Pupils attending math classes for 20 or more sessions will show an increase of two months or more on a standardized math test.
3. Upon conclusion of the project, eighty percent of the participants enrolled in the cultural enrichment component will have acquired fifty new vocabulary words in the areas of creative, performing, and graphic arts as measured by teacher records.
4. Upon conclusion of the project, seventy percent of those pupils participating in the Bus Trip Program will have acquired thirty new facts associated with the places visited.

Evaluation Objectives

The evaluation focused on the degree to which the objectives noted previously were met. The major evaluation objectives were:

1. To describe and evaluate the implementation of the program.

2. To determine if eighty percent of the participants in classes for language arts, mathematics, social studies, and science received a passing grade.
3. To determine if seventy percent of the pupils attending 20 sessions had improved their reading vocabulary, comprehension, and mathematical concepts and problems by two months.
4. To determine if eighty percent of the participants in the cultural enrichment program had learned fifty new words.
5. To assess if seventy percent of the children participating in the Bus Trip Program acquired thirty facts about the places visited.

Evaluation Procedures

To meet the stated evaluation objectives all five schools were visited and all classes were observed. An Observer Check List (see Table XXIV) was used during site visits to the summer school programs.

To determine if eighty percent of the participants had passed course requirements in language arts, mathematics, social studies, and science, the grades for all the pupils in each of the subjects were collated at the end of the program. A grade of 65 or above was considered passing. The percentage of pupils attaining 65 or above was computed for each subject area. Additional analyses included tests of significance of the proportion of students passing the summer program as compared to these same students' previous performance in the regular school setting. Such analyses were contingent upon availability of data from the regular program.

To determine if seventy percent of the pupil population who had attended at least 20 sessions in classes to improve mathematics skills and reading

TABLE XXIV

New York University
Center for Field Research

CLASSROOM OBSERVER CHECK LIST

	YES	NO
A. Physical Facilities		
1. Separate Area for Reading Program	___	___
2. Size of area adequate	___	___
3. Space available for small group work	___	___
4. Space available for individual work	___	___
5. Storage facilities adequate	___	___
6. Chalkboard available	___	___
7. Area attractive	___	___
8. Adequate physical provisions (lights, ventilation, etc.)	___	___
Overall Rating of Facilities	1 2 3 4 5	
B. Materials		
1. Variety of materials being used		
a. Basal readers	___	___
b. Workbooks	___	___
c. Trade books	___	___
d. Magazines	___	___
e. Newspapers	___	___
f. Content-area materials	___	___
g. Other	___	___
2. Teacher-made materials	___	___
3. Audio-visual aids	___	___
4. Interest level appropriate to age and maturity of pupils	___	___
5. Level of materials suitable to reading ability of pupils	___	___
6. Differentiation between instructional level and independent level materials	___	___
7. Attractive in appearance	___	___
8. Sufficient quantity	___	___
Overall Rating of Materials	1 2 3 4 5	

skills had improved their mathematics and reading vocabulary and comprehension by an increase of two months or more, appropriate sections of the California Achievement Tests were administered to thirty percent of the randomly selected subjects attending classes designed to improve these skills. The tests were administered at the beginning and close of the project. Pre-measures were collected during the first week of the program and post-measures during the last week of the program. Level 4, Form A, 1970 Edition was used.

Those children showing two or more months growth were compared to the total sample population in the program which they were attending to determine if seventy percent had achieved two months growth in mathematics and reading. Means and standard deviations were reported. A *t*-test was computed to assess differences between pre- and post-tests.

To determine if eighty percent of the participants enrolled in the cultural enrichment component had acquired fifty new vocabulary words in the areas of creative, performing, and graphic arts, thirty-five subjects were randomly drawn from participating schools and teacher constructed creative, performing, and graphic arts vocabulary tests were administered at the beginning and close of the program.

The percentage of children acquiring fifty or more words was computed to determine if it met or exceeded eighty percent. Reliability was determined by the alpha coefficient. A *t*-test was computed to assess differences between pre- and post-tests.

To determine if seventy percent of those pupils participating in the Bus Trip Program had acquired thirty new facts associated with the places visited, the person in charge of the Bus Trip Program constructed a test

assessing educationally relevant facts associated with the places visited. The trip information test was administered to all students at the end of the trip. The percentage of children acquiring thirty or more facts was computed to determine if it met or exceeded seventy percent. Reliability of the test was determined by the alpha coefficient. A t-test was computed to assess differences between pre- and post-tests.

Data Analysis

The results of the evaluation are presented in relation to the major evaluative procedures employed.

The grades for all the pupils in each of the subjects were collected at the end of the program and the percentage of pupils attaining 65 or more was computed for each subject area. Only students who completed courses were included, students who dropped out or were excessively absent were not included. In all schools the objectives as outlined in the project proposal were met. Eighty percent of the participants in classes for language arts, mathematics, social studies, and science received a passing grade.

A Bus Trip Information Test was constructed and administered by the person in charge of bus trips. Seventy percent of the pupils participating in the program had acquired thirty new facts associated with the places visited.

Teachers in charge of the cultural enrichment program constructed appropriate vocabulary tests which were administered at the beginning and close of the program. The percentage of students acquiring 50 or more words was computed and found to exceed eighty percent, the program objective as outlined in the project proposal.

Approximately 30 percent of the subjects attending classes designed to improve their reading skills were randomly selected and the reading vocabulary and reading comprehension section of the California Achievement Tests were administered to them. It was found that (1) there was no difference in the pre- and post-tests, and (2) the range in gains and losses was approximately the same. Fifty-nine percent of the students showed an increase in vocabulary and fifty-four percent showed an increase in comprehension.

TABLE XXV

TEST OF SIGNIFICANCE ON READING VOCABULARY AND COMPREHENSION SECTIONS OF THE CALIFORNIA ACHIEVEMENT TESTS FOR THE SUMMER SCHOOL PROGRAM

SECTIONS	N	MEAN PRE	MEAN POST	SD PRE	SD POST	t	SIGNIFICANCE
Vocabulary	26	6.1	6.6	2.7	2.1	1.44	n.s.
Comprehension	26	5.2	5.0	2.1	2.3	-.48	n.s.

Approximately 30 percent of the subjects attending classes designed to improve their mathematical skills were randomly selected and the mathematical problems and concepts sections of the California Achievement Tests were administered to them. It was found that there was a .7 gain from pre- to post-test. This means that the children gained seven months growth in a six-week period -- a significant improvement in mathematical functioning.

Approximately 73 percent of the subjects showed such growth.

TABLE XXVI

TEST OF SIGNIFICANCE ON MATHEMATICAL PROBLEMS AND MATHEMATICAL CONCEPTS SECTIONS OF THE CALIFORNIA ACHIEVEMENT TESTS FOR THE SUMMER SCHOOL PROGRAM

SECTIONS	N	MEAN PRE	MEAN POST	SD PRE	SD POST	t	SIGNIFICANCE
Problems and Concepts	26	5.7	6.4	2.0	2.4	2.15	.038

RECOMMENDATIONS

Specific recommendations as they apply to individual schools are found in the section dealing with particular programs. Here, general recommendations, which apply to all schools, are made with a view toward improving a sound program.

1. Hours should be changed so that the school day runs from 8:00 a.m. to 12 noon. This would preclude the problem of early dismissal for Vacation Day Camp Trips, etc. Furthermore, if lunch was served at noon, students would be able to take full advantage of area recreational programs, i.e., swimming pools, Vacation Day Camps, etc. It should also be recognized that the earlier hours are cooler and more conducive to learning -- particularly in older schools where ventilation is poor.

2. Funding should be allocated at an earlier date so that ordering and receipt of materials could be accomplished before the program begins. Provisions should be made for fluid funds vis-a-vis the depositing of funds, preferably one-third of the allotment, to be drawn on as needed. This would eliminate the personal outlay of money by staff which was not negligible.

3. To ensure a smooth-running, full day's program on the first day of school, students should be pre-registered -- and personnel should be paid for the time needed for this preparation. Staff should also be given adequate time to prepare programs and materials. A three day paid planning period would be adequate.

4. Students should not be required to take three subjects. There is enough accumulated research evidence to support the recommendation that four hours of school work is too long for students who have a history of academic failure. It should also be noted that students enrolled in enrichment courses tend to view hour requirements as punitive.

5. It is recommended that a total break period of 15 minutes be incorporated into all programs. A four-hour day is almost equivalent to six periods of straight teaching and this arrangement places undue physical and emotional stress on teachers. Another way of handling this problem would be to place an educational assistant in each room. This would decrease the intensity of the work load and

allow teachers to take one or two five-minute breaks.

6. Before the program begins, subject teachers from all schools should get together and coordinate efforts in the development and preparation of materials for developmental, corrective, and remedial instruction. As research has shown, there is no one "best way" to teach. Most successful programs seem to be those in which teachers use a variety of materials, equipment, and instructional techniques. Because of limited time, such dialogue might enable teachers to work on common problems and exchange materials and ideas.

7. A goal for future evaluations should be a comparison between summer growth gains and retention for students enrolled in the Secondary Summer Program and students not receiving this benefit.

SUMMARY AND CONCLUSIONS

This evaluation of the secondary school summer program contains three major components. The report has:

1. described the implementation of the program in all participating schools;
2. assessed the percentage of students who had passed course requirements as measured by report card grades;
3. considered several aspects of pupil growth -- evaluation including analysis of reading vocabulary, reading comprehension, mathematical problems and concepts, bus trip information for students participating in the bus program, and cultural enrichment vocabulary for students enrolled in the cultural enrichment program.

The data collected yield the following conclusions:

1. Observation of the program indicates that the program was implemented as outlined in the project proposal
2. In respect to physical facilities, materials, planning, teaching procedures, and the functioning of teachers and pupils in the programs, there was variability across the schools. Generally, they were good with the exception of physical facilities where, older schools had serious ventilation problems.
3. Assessment of teachers' background and experience indicated consistency with subjects taught.
4. Evaluation of student grades showed that 80 percent of the students passed course requirements in language arts, mathematics, social studies, and science.
5. Assessment of the bus trip program indicated that over 70 percent of participating students had acquired thirty new facts associated with the places visited.
6. Assessment of vocabulary growth for those attending the cultural enrichment program was characterized by an addition of 50 new words for 80 percent of those enrolled.
7. Analysis of reading vocabulary and reading comprehension test scores yielded no significant gains from initial to final scores on the California Achievement Tests. The range in gains was about the same as the range in losses. This indicates the need to develop alternate teaching

strategies for the 41 percent of the student body who showed a loss in reading vocabulary and the 46 percent of the student body who showed a loss in reading comprehension.

8. Analysis of mathematical problems and concepts scores yielded significant gains from initial to final scores in the California Achievement Tests. There was a gain of seven months from pre- to post-tests. Seventy-three percent of the subjects improved in mathematical functioning.

In summary, then, the program objectives were met and the summer school programs were favorably perceived by this evaluator.

APPENDIX A

SOCIAL-EMOTIONAL BEHAVIOR SCALE

PRESCHOOL PROGRAM

SOCIAL-EMOTIONAL BEHAVIOR SCALE

Check appropriate column:	1 EXHIBITS TO A MINOR DEGREE	2 EXHIBITS TO A MINOR DEGREE	3 EXHIBITS TO A MINOR DEGREE
1. Behavioral Chararacteristics			
a. Hyperactive and restless			
b. Lethargic			
c. Daydreaming alternating with hyperactivity			
d. Inconsistent achievement			
e. Explosive and unpredictable behavior			
f. Upset by changes in routine			
g. Confused, indecisive, or apprehensive in responding			
h. Confused by punishment			
i. Lacking in self-control (will speak out or jump out of seat)			
2. Social Relationships			
a. Inclined to work alone--withdraws quickly from group activities			
b. Aggressive and destructive, especially of work of others			
c. Disruptive of group activities			
d. Lacking in cooperation			
3. Poor acceptance of responsibility			
4. Attention			
a. Cannot concentrate on a given academic or social task for a reasonable length of time			
b. Does not listen attentively			
c. Says, "What?" when he receives instructions (because of insecurity)			
d. Gives inappropriate answers to questions			
e. Needs constant supervision to complete an assignment			
f. Lacks perseverence on a given task			

Check appropriate column:	1 EXHIBITS TO A MINOR DEGREE	2 EXHIBITS TO A MINOR DEGREE	3 EXHIBITS TO A MINOR DEGREE
5. Emotional Development and Control			
a. Stability			
(1) Crying			
(2) Fear			
(3) Temper			
(4) Excitability			
(5) Exhibitionism			
(6) Sensitivity			
(7) Insecurity			
b. Self-Reliance			
(1) Confusion			
(2) Dependence			
(3) Discouragement			
(4) Lack of confidence			
c. Reality-testing - tells bizarre stories			

KEY: 1. If checks are concentrated in Column 1
2. If checks are scattered
3. If checks are concentrated in Column 3

SOCIAL-EMOTIONAL RATING [ ]

PERCEPTION SCALE

Check appropriate items and column:	1 GOOD	2 FAIR	3 POOR
Auditory discrimination listen to story; follow			
Visual discrimination			
Gross Motor Coordination			
a. Walking without stumbling into things			
b. Catching or throwing a ball			
c. Running in a coordinated way			
d. Hopping in a coordinated way			
e. Skipping in a coordinated way			
f. Walking a straight line			
g. Balancing (on a balance beam)			
Fine Motor Coordination			
a. Position or grip on pencil or crayon			
b. Ability to color smoothly within boundaries			
c. Manipulation of paintbrush and paint			
d. Tying of shoelaces			
e. Cutting and pasting			
f. Competency in writing: letters			
own name			
numbers			
Sense of Rhythm			
a. Tapping out a song			
b. Marching or dancing to music			
c. Success in a rhythm band			
d. Ability to recognize or imitate simple rhythmic patterns			
Visual-motor Coordination			
a. Ability to copy correctly from: near point			
far point			
b. Reproduction of geometric figures			

KEY:
1. If checks are concentrated in Column 1
2. If checks are scattered
3. If checks are concentrated in Column 3

PERCEPTION RATING [ ]

APPENDIX B

PERCEPTION SCALE

PRESCHOOL PROGRAM

APPENDIX C

UPPER ELEMENTARY GRADES CATEGORIES FOR SOCIAL-EMOTIONAL CLIMATE INDEX

V: APPENDIX C: UPPER ELEMENTARY GRADES CATEGORIES FOR SOCIAL-EMOTIONAL CLIMATE INDEX

John Withall

Criteria of Teacher-Statement Categories

1. LEARNER SUPPORTIVE statements or questions

These are teacher-statements or questions that express agreement with the ideas, actions or opinions of the learner, or that commend or reassure the learner. Agreement is frequently expressed by a monosyllabic response such as "Yes," "Right," "Uhuhuh," and the like. Commendation or reassurance may be stated in terms of:

a. class-accepted criteria or goals
   or
b. the private goals and subjective criteria of the teacher.

The dominant intent of these statements or questions is to praise, encourage or bolster the learner.

2. ACCEPTANT or CLARIFYING statements or questions

These are teacher-statements or questions which either:

a. accept, that is, evidence considerable understanding by the teacher of, or
b. clarify, that is, restate clearly and succinctly in the teacher's words

the identional or the feeling content of the learner's statement. The dominant intent of these teacher-responses is to help the learner to gain insight into his problem, that is, define his "real" problem and its solution in more operational terms.

3. PROBLEM-STRUCTURING statements or questions

Problem-structuring responses by the teacher offer facts or ideas or opinions to the learner about

a. phenomena
b. procedures

in a non-threatening and objective manner. These responses contain NO element of advising or recommending the adoption of certain ideas or procedures. Problem-structuring responses are frequently posed as questions which seek further information from the learner about the

problem confronting him: or they may be statements which offer information to the learner about his problem. The learner is free to accept or to reject in part or in entirety the facts or opinions that are presented to him. Problem-structuring responses may be questions which the teacher asks (1) to further increase her own understandings of what the learner has said, or (2) to increase the precision of the learner's statement of the problem. Problem-structuring responses are problem-centered rather than either teacher or learner-centered: nevertheless, they do tend to sustain the learner by facilitating his problem-solving abilities.

4. NEUTRAL statements evidencing no supportive intent

These statements are neither teacher-sustaining, nor learner-sustaining nor problem-centered. They constitute a small percentage of the total teacher-responses. These responses include statements in which the teacher: (1) questions herself aloud; (2) repeats verbatim a statement that the learner just made; (3) uses a polite formality, et cetera. Statements having to do with administrative procedure -- the room in which the class will meet, the hour at which a conference will occur -- (especially after consensus has been achieved), fall into this category.

4a. PERFUNCTORY statements or questions

Responses such as "uhhuh", "good" whose intent is to end children's contributions or act as a comma. They are primarily teacher-centered. (This category was added by the evaluators.)

5. DIRECTIVE statements or questions

These are teacher-statements or questions which advise the learner regarding a course of action of his future behavior and which narrowly limit his choice or offer to choice. These statements recommend to the learner the facts or procedures that the teacher proffers him. These statements or questions convey the impression to the learner that the teacher expects and hopes that he will follow her prompting and that she will approve if he does. The <u>intent</u> of these responses is to have the learner take up the teacher's point of view and pursue a course of action that she advocates.

6. REPROVING, DISAPPROVING or DISPARAGING statements or questions

By means of these statements a teacher may express complete or partial disapproval of the ideas, behaviors, and, to her, personality weaknesses of the learner. The teacher's internalized societal values largely enter into these responses. By means of these statements some teachers believe they are fulfilling their responsibility of inculcating in young people society's standards of acceptable and desirable behavior and achievement. The intent of these statements is:

a. to represent to the learner societal values as the teacher sees them;
b. to admonish the learner for unacceptable behavior and to deter him from repeating it in the future;
c. to impress on the learner the fact that he has not met the criteria for successful achievement which the teacher accepts.

7. TEACHER-SUPPORTIVE statements or questions

These are statements or questions in which the teacher refers to herself and expresses a defensive attitude, or refers to her present or past interests, activities or possessions with the purpose of reassuring herself and of confirming her position on her ideas in the eyes of those around her. The dominant intent of these teacher-responses is to assert, to defend or to justify the teacher. Statements in which the teacher perseverates on an idea, a belief or a suggestion would fall in this category. By "perseveration" is meant a persisting in, a reiteration of, and a rigid advocacy of an idea or opinion by the teacher despite additional data being presented to her which calls for a re-examination of the original idea or opinion.

APPENDIX D

A FRAME OF REFERENCE AND

PROCEDURE TO FACILITATE CATEGORIZATION

OF TEACHER-STATEMENTS

A FRAME OF REFERENCE AND PROCEDURE TO FACILITATE CATEGORIZATION OF TEACHER-STATEMENTS

Each teacher-statement contains <u>one</u> of two dominant kinds of intent.

either a) intent to sustain the teacher and his behavior (teacher-centered statements)
or b) intent to sustain the learner and his behavior (learner-centered statements and issue-centered statements are included under this intent).

By analysis of both the CONTEXT and the CONTENT of a teacher statement it may be possible to determine whether the dominant intent of a statement is to sustain the teacher or the learner.

Once the dominant intent of a teacher-statement has been ascertained, one can proceed to determine the technique by which the support is conveyed.

1. If the statement is intended primarily to <u>sustain the teacher</u>, one or possibly a combination of the two following techniques may be used:

   a) reproof of the learner (category 6)
   b) directing or advising the learner (category 5)

   Frequently the intent of the statement is to sustain the teacher yet neither of the above techniques is used. In that event the statements is simply a self-supportive remark which defends the teacher or evidences perseveration in support of the teacher's position or ideas. (category 7)

2. If the intent of a statement is to <u>sustain the learner</u> then one or possibly a combination of the two following techniques may be used:

   a) clarification and acceptance of the learner's feelings or ideas (category 2),
   b) problem-structuring statements (category 3).

   Frequently the intent of a statement is to sustain the learner yet neither of the above techniques is used. In that event the statement is simply one that reassures, commends, agrees with or otherwise sustains the learner (category 1).

   Infrequently a teacher-statement may have no dominant intent to sustain either the teacher or the learner. If the statement represents neither of the techniques in the two intent areas nor gives evidence of being one of the more general kinds of support-

ing statements, then the statement can be considered to have no intent to support and should be placed in category 1.

Recourse to the learner-statement or behavior before and after a teacher response, particularly when one encounters a statement in which the intent is difficult to ascertain, is sometimes helpful in categorizing the teacher's statements.

APPENDIX E

UPPER ELEMENTARY GRADES SUMMARY

DEFINITIONS OF QUESTIONS

APPENDIX E: UPPER ELEMENTARY GRADES SUMMARY DEFINITIONS OF QUESTIONS

from "Guided Self Analysis",

Theodore W. Parsons

RHETORICAL: Questions which teachers do not intend or allow pupils to answer.

INFORMATION: Questions which ask pupils to identify and describe:

a) Objects, qualities, actions and relationships previously observed, read or discussed (information recall).

b) Objects, qualities, actions and relations observed in immediate experience.

LEADING: Questions which guide or "clue" pupils to the desired answer, or to appropriate means for determining the answer.

PROBING: Questions which ask pupils to:

a) Generate concepts, principles, or rules which explain relationships among units of information.

b) Apply known concepts, principles or rules to the analysis of new information.

OTHER: Questions not directly related to development of the ideas under consideration.